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<110> SPECHT, THOMAS
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PILARSKY, CHRISTIAN
DAHL, EDGAR
ROSENTHAL, ANDRE

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<150> PCT/DE99/00909

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<150> DE 198 13 835.0

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 1668

<212> DNA

<213> Homo sapiens

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<211> 933

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 1025

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 360

<212> DNA

<213> Homo sapiens

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 <212> DNA
 <213> Homo sapiens

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 <212> DNA
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attcacagta at 2952

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<210> 50

<211> 615

<212> DNA

<213> Homo sapiens

<400> 50

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tcccatagaa cactcttttt tatcttcctt gaaccatatt gatgagataa atagggctgg 180
gggctgggcc ccgctgggtc ctcaacagag tatttccctt ggccgagatg gaagtgttgt 240
cccaatagat gagctgctga gtatcaacaa ggtgacattt ttctgctgcc catttggtgc 300

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```

ctggagacgg tggtagcctg aaggcagagg ccagctgccg caagacagca atgacagtcc 360
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cccaaattggg ggtggcactt atcctgaagt cgtcaatgat ttccctttga aactacttta 480
ttttactaat ttaaactatt ttgtactgat gtagccctga ggtagttcat gaaaatgctg 540
tgcactcatt ccatggaata aatggttgaa agctgatctt ttctgatata aaatggtgaa 600
tgataaaaaa aaaaaa                                     615

```

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<210> 51
<211> 1488
<212> DNA
<213> Homo sapiens

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<400> 51
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<210> 52

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<400> 52
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<210> 53
<211> 2262
<212> DNA
<213> Homo sapiens

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<400> 53
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attaacgact agattaaaat attgccttca agattgttct tacttacaag acttgctcct 240
acttctatgc tgaaaattga ccctggatag aatactataa ggttttgagt tagctggaaa 300

```

```

agtgatcaga ttaataaatg tatattggta gttgaattta gcaaagaaat agagataatc 360
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gtaataatgg tttccaaaga gtatttttta aaggaacaaa acgagcatga attaactctt 480
caatataaag tatgaagtaa tagttgggtg tgaattaaaag tggcaccagc tagcacctct 540
gtgttttaag ggtctttcaa tgtttctaga ataagccctt attttcaagg gttcataaca 600
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ttaggtactt acataaattg ttacattatt ttttcttatg taataccttt ttgtttgttt 2220
atgtggttca aatatattct ttccttaaac tcttaaaaaa aa 2262

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<210> 54

<211> 1301

<212> DNA

<213> Homo sapiens

<400> 54

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cacggaggga gccagccccg accttgcccc gctgcggccc gcggtccccg gccaaacccc 180
cctcaggaaa gaggttttaa aatcaaagat gggaaaatcg gagaaaattg ccttcccca 240
tgccagctt gttcatggta tacacttgta tgagcaacca aagataaaca gacagaaaag 300
caaataaac ttgccactaa ccaagatcac ctctgcaaaa agaaatgaaa acaacttttg 360
gcaggattct gtttcatctg acagaattca gaagcaggaa aaaaagcctt taaaaatac 420
cgagaacatt aaaaattcgc atttgaagaa atcagcattt ctaactgaag tgagccaaaa 480
ggaaaattat gctggggcaa agtttagtga tccaccttct cctagtgttc ttccaaagcc 540
tcctagtcac tggatgggaa gcactgttga aaattccaac caaaacaggg agctgatggc 600
agtacactta aaaacgctcc tcaaagttca aacttagatt tcagatttca gtatgtgtgt 660
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cttgagaggt atattatagt tttgttatga aagtatgtat tttgccctgc ccacattgca 900
ggtgttttgt atatatcaa tggataaatt ttaagtgtgt gctaaggcac atggaaggcc 960
gattttattt gcacaaggta ctgagatttt tttcaagaaa cagctgtcaa atctcaaggt 1020

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gaagatctaa atgtgaacag tttactaatg cactactgaa gtttaaattct gtggcacaat 1080
caatgtaagc atgggggtttg tttctctaaa ttgatttgta atctgaaatt actgaacaac 1140
tcctattccc attttttgcta aactcaattt ctgggttttgg tatatatcca ttccagctta 1200
atgacctctaa ttttaattgcc aacaaaattg gttgtaaatca aattttaaaa taataataat 1260
ttggccccc ctttttaaaa aaaaaaaaaa aaaaaaaaaa a 1301

```

<210> 55

<400> 55

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<210> 56

<211> 1265

<212> DNA

<213> Homo sapiens

<400> 56

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tggtgggaga atctcacaag cggaccagag atctttttta atccctgcta ctgtcccttc 240
tcacaggcat tcacagaacc cttctgattc gtaagggtta cgaaactcat gttcttctcc 300
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tcagaacccat gcagataagg agcctctggc aaatgggtgc tcatcagaac gcgtggattc 420
tctttcatgg cagaatgctc ttggactcgg ttctccaggc ctgattcccc gactccatcc 480
tttttcaggg gttattttaa aatctgcctt agattctata gtgaagacaa gcatttcaag 540
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ttttgaatgt ttgctttaag tgttggctat ttctatgttt tataaaccaa aacaaaattt 1200
ccaaaaacaa tgaaggaaac caaaataaat atttctgcat ttcaaatgaa aaaaaaaaaa 1260
aaaaa 1265

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<210> 57

<211> 274

<212> DNA

<213> Homo sapiens

<400> 57

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aatgatttct tacaaatcct ctgaaaagta aaactgatac ttttataaac agaagtatat 120
gcaaacagtc acaatatgca ttaggacgac tgacgatatt tcttacatgc cagggaagttc 180
ttccatccca gcaaacacct cttatctgaa agtggttttt ctctataaa ttggcatcta 240
agggattttt aaaaagtcaa aaacagtggc aggg 274

```

<210> 58

<211> 2073

<212> DNA

<213> Homo sapiens

<400> 58

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taaattttcca aatgttcact cgaggatctt agaaaccaac catacagacg agccgatgcg 60
gtgaggagaa gcgtcaggcg gcgctttgat gatcagaact tgcgttctgt taatggtgcc 120
gaaataacaa tgtgaacctg agactggcct gcatgaatac aggggtgtgcg tgaatgaaac 180
tgcccacatg aactttatgt gctacgattt aactgcagcc ttgaacacac acaaaaatat 240
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catgatgaaa ctccctttgt ctataaccag gccctggcaa agtgcaaaca ggatgcaact 660
gcagtggcac aaaggctcact caatcccttg tttccagttt cacattctac tacttctgtg 720
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agacttattt gcagtactgt gttcttcagc tagaggcagc tttttaaata atgcaagtgt 840
atttatttagc attaaaatta acatctcagt aatcagcatt agcatttctg aggaccatta 900
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gccactgtta ttttcccttc tctctggcag ggcacttgat ccattccaaa gtcaaaaact 1260
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2073

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<210> 59

<211> 850

<212> DNA

<213> Homo sapiens

<400> 59

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gatctcagtg ttgtgggtaa ctttgtgtgt cttaattcgg aaatctggaa catagatgat 120
gattttttcc tttgaattaa cttaatgtgt tctcttccct acagatttca gaacttatat 180
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gttggtgtca tgttgagaaa aaggtagaat aaaccttact acacattaaa agttaaaagt 480
tcttactaat agtagtgaag ttagatgggc caaacatca aacttatttt tatagaagt 540
attgagaata atctttctta aaaaatatat gcactttaga tattgatata gtttgagaaa 600
ttttattaaa gttagtcaag tgcctaagtt tttaatatgt gacttgagta tttatatatt 660

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gtcgttgttt aagagaattg tgtgaaatca tgtagttgca aataaaaaat agtttgaggc 840
atgaaaaaaa                                     850

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<210> 60
<211> 2091
<212> DNA
<213> Homo sapiens

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<400> 60
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tttctttcag gtagacacct tttaaaatgc agaactaact gaggcatttc agtaactttg 180
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tgtactcaaa ttctctactg tatgaattat gctttaagta gaattcagtg ccaaggagaa 300
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tggttgatgt gtgctctgta cacaagccat ttcaatagga tggagctgtt aattattttc 420
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atgaacgtaa tccctttgct agaaatatct aagagcagct cagcttggtt gaaactgagt 780
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atactttatg tactatgtga ctcatgcttc tggataaata aagcaccaaa tatgtatctg 1980
taaccacaat cacacatatt atattaaata tatatctata taacagccaa aaaaaaaaaa 2040
agaagagaag aaaaagaaag gagagggggg gggagagaag gggggggagg t 2091

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<210> 61
<211> 2952
<212> DNA
<213> Homo sapiens

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<400> 61
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ttcacctgtc tcaaatgaag attatcactc cacttgatga acatcttaga agcagaccaa 180

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<211> 1071

<212> DNA

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atctgacaat gtgaaaaaa 2419

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<210> 77

<211> 366

<212> PRT

<213> Homo sapiens

<400> 77

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Ile Ala Ser Ala Arg Leu Glu Glu Val Thr Gly Lys Leu Gln Val Ala
  1              5              10              15

Arg Asn Leu Ile Met Arg Gly Thr Glu Met Cys Pro Lys Ser Glu Asp
      20              25              30

Val Trp Leu Glu Ala Ala Arg Leu Gln Pro Gly Asp Thr Ala Lys Ala
      35              40              45

Val Val Ala Gln Ala Val Arg His Leu Pro Gln Ser Val Arg Ile Tyr
      50              55              60

Ile Arg Ala Ala Glu Leu Glu Thr Asp Ile Arg Ala Lys Lys Arg Val
      65              70              75              80

Leu Arg Lys Ala Leu Glu His Val Pro Asn Ser Val Arg Leu Trp Lys
      85              90              95

Ala Ala Val Glu Leu Glu Glu Pro Glu Asp Ala Arg Ile Met Leu Ser
      100             105             110

Arg Ala Val Glu Cys Cys Pro Thr Ser Val Glu Leu Trp Leu Ala Leu
      115             120             125

Ala Arg Leu Glu Thr Tyr Glu Asn Ala Arg Lys Val Leu Asn Lys Ala
      130             135             140

Arg Glu Asn Ile Pro Thr Asp Arg His Ile Trp Ile Thr Ala Ala Lys
      145             150             155             160

Leu Glu Glu Ala Asn Gly Asn Thr Gln Met Val Glu Lys Ile Ile Asp
      165             170             175

Arg Ala Ile Thr Ser Leu Arg Ala Asn Gly Val Glu Ile Asn Arg Glu
      180             185             190

Gln Trp Ile Gln Asp Ala Glu Glu Cys Asp Arg Ala Gly Ser Val Ala
      195             200             205

Thr Cys Gln Ala Val Met Arg Ala Val Ile Gly Ile Gly Ile Glu Glu
      210             215             220

Glu Asp Arg Lys His Thr Trp Met Glu Asp Ala Asp Ser Cys Val Ala
      225             230             235             240

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35

<210> 80
 <211> 25
 <212> PRT
 <213> Homo sapiens

<400> 80
 Lys Thr Pro Ser Leu Gln Ser Lys Thr Lys Asn Asn Lys Trp Ser Cys
 1 5 10 15

Ala Met Leu Tyr Cys Phe Ala Gln Asn
 20 25

<210> 81
 <211> 29
 <212> PRT
 <213> Homo sapiens

<400> 81
 Asp Pro Val Ser Thr Lys Gln Asn Glu Lys Gln Gln Met Glu Leu Cys
 1 5 10 15

Tyr Val Val Leu Leu Cys Thr Lys Leu Gly Thr Gly Val
 20 25

<210> 82
 <211> 32
 <212> PRT
 <213> Homo sapiens

<400> 82
 Pro Lys Arg Arg Val Ser Asp Thr Ser Ser Gly Pro Thr Pro Cys Met
 1 5 10 15

Glu Pro Ile Leu Gly Arg Thr His Tyr Ser Gln Leu Arg Lys Lys Ser
 20 25 30

<210> 83
 <211> 54
 <212> PRT
 <213> Homo sapiens

<400> 83
 Leu Gly Gln Asp Ser His Gln His Ile Thr His Val Leu Leu Gly Arg
 1 5 10 15

Glu Lys Gln Tyr Ile Pro Val Glu Arg Ser Gln Ser Ile Ser Gly Arg
 20 25 30

Asn Val Val Lys Gly Gly Arg Cys Tyr Ala Ala Ala Pro Ser Val Pro
 35 40 45

Glu Val Ala Val Ile Pro

50

<210> 84
 <211> 54
 <212> PRT
 <213> Homo sapiens

<400> 84
 Gly Asp Gln Ala His Arg Glu Gln Gly Lys Glu Gln Ala Met Phe Asp
 1 5 10 15
 Lys Lys Val Gln Leu Gln Arg Met Val Asp Gln Arg Ser Val Ile Ser
 20 25 30
 Asp Glu Lys Lys Val Ala Leu Leu Tyr Leu Asp Asn Glu Glu Glu Glu
 35 40 45
 Asn Asp Gly His Trp Phe
 50

<210> 85
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 85
 Gly Thr Arg His Pro Leu Ser Leu Ser His Lys Pro Ala Lys Lys Ile
 1 5 10 15
 Asp Val Ala Arg Val Thr Phe Asp Leu Tyr Lys Leu Asn Pro Gln Asp
 20 25 30
 Phe Ile Gly Cys Leu Asn Val Lys Ala Thr Phe Tyr Asp Thr Tyr Ser
 35 40 45
 Leu Ser Tyr Asp Leu His Cys Cys Gly Ala Lys Arg Ile Met Lys Glu
 50 55 60
 Ala Phe Arg Trp Ala Leu Phe Ser Met Gln Ala Thr Gly His Val Leu
 65 70 75 80
 Leu Gly Thr Ser Cys Tyr Leu Gln Gln Leu Leu Asp Ala Thr Glu Glu
 85 90 95
 Gly Gln Pro Pro Lys Gly Lys Ala Ser Ser Leu Ile Pro Thr Cys Leu
 100 105 110
 Lys Ile Leu Gln
 115

<210> 86

<400> 86
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<210> 87
 <211> 71
 <212> PRT
 <213> Homo sapiens

<400> 87
 Asn Arg Gly Gly Val Gly Phe Gly Val Gly Trp Ser Leu Pro Phe Glu
 1 5 10 15
 Leu Leu Ile Phe Met Ser Arg Leu Gln Asn Ser Arg Val Gly Leu Thr
 20 25 30
 Met Trp Gly Gly Gly Gly Ser Ser Leu Phe Phe Tyr Phe Gln Val His
 35 40 45
 Ser Trp Gly Trp Trp Gly Gly Arg Arg Ile Pro Leu Pro Lys Pro Leu
 50 55 60
 Val Cys Ala Glu Leu Ala Leu
 65 70

<210> 88
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 88
 Tyr Arg His Glu Pro Leu Tyr Pro Ala Phe Pro Tyr Lys Ile Gln Arg
 1 5 10 15
 Glu Asn Phe Tyr Thr Phe Ile Pro Gln Ile Lys Gln Val Leu Ser Ser
 20 25 30
 Tyr Arg Ala Leu Ala Arg Ser Ile Cys Lys Arg Asn Leu Lys Phe Ser
 35 40 45
 Cys Arg Ile Lys Leu Asp Lys
 50 55

<210> 89
 <211> 411
 <212> PRT
 <213> Homo sapiens

<400> 89
 Leu Ala Thr His Ser Pro Gln Lys Ser His Gln Cys Ala His Cys Glu
 1 5 10 15
 Lys Thr Phe Asn Arg Lys Asp His Leu Lys Asn His Leu Gln Thr His
 20 25 30
 Asp Pro Asn Lys Met Ala Phe Gly Cys Glu Glu Cys Gly Lys Lys Tyr
 35 40 45
 Asn Thr Met Leu Gly Tyr Lys Arg His Leu Ala Leu His Ala Ala Ser

50					55					60					
Ser	Gly	Asp	Leu	Thr	Cys	Gly	Val	Cys	Ala	Leu	Glu	Leu	Gly	Ser	Thr
65					70					75					80
Glu	Val	Leu	Leu	Asp	His	Leu	Lys	Ala	His	Ala	Glu	Glu	Lys	Pro	Pro
				85					90					95	
Ser	Gly	Thr	Lys	Glu	Lys	Lys	His	Gln	Cys	Asp	His	Cys	Glu	Arg	Cys
			100					105					110		
Phe	Tyr	Thr	Arg	Lys	Asp	Val	Arg	Arg	His	Leu	Val	Val	His	Thr	Gly
		115					120					125			
Cys	Lys	Asp	Phe	Leu	Cys	Gln	Phe	Cys	Ala	Gln	Arg	Phe	Gly	Arg	Lys
	130					135					140				
Asp	His	Leu	Thr	Arg	His	Thr	Lys	Lys	Thr	His	Ser	Gln	Glu	Leu	Met
145						150					155				160
Lys	Glu	Ser	Leu	Gln	Thr	Gly	Asp	Leu	Leu	Ser	Thr	Phe	His	Thr	Ile
				165					170					175	
Ser	Pro	Ser	Phe	Gln	Leu	Lys	Ala	Ala	Ala	Leu	Pro	Pro	Phe	Pro	Leu
			180					185					190		
Gly	Ala	Ser	Ala	Gln	Asn	Gly	Leu	Ala	Ser	Ser	Leu	Pro	Ala	Glu	Val
		195					200					205			
His	Ser	Leu	Thr	Leu	Ser	Pro	Pro	Glu	Gln	Ala	Ala	Gln	Pro	Met	Gln
	210					215					220				
Pro	Leu	Pro	Glu	Ser	Leu	Ala	Ser	Leu	His	Pro	Ser	Val	Ser	Pro	Gly
225						230					235				240
Ser	Pro	Pro	Pro	Pro	Leu	Pro	Asn	His	Lys	Tyr	Asn	Thr	Thr	Ser	Thr
				245					250					255	
Ser	Tyr	Ser	Pro	Leu	Ala	Ser	Leu	Pro	Leu	Lys	Ala	Asp	Thr	Lys	Gly
			260					265					270		
Phe	Cys	Asn	Ile	Ser	Leu	Phe	Glu	Asp	Leu	Pro	Leu	Gln	Glu	Pro	Gln
		275					280					285			
Ser	Pro	Gln	Lys	Leu	Asn	Pro	Gly	Phe	Asp	Leu	Ala	Lys	Gly	Asn	Ala
	290					295					300				
Gly	Lys	Val	Asn	Leu	Pro	Lys	Glu	Leu	Pro	Ala	Asp	Ala	Val	Asn	Leu
305						310					315				320
Thr	Ile	Pro	Ala	Ser	Leu	Asp	Leu	Ser	Pro	Leu	Leu	Gly	Phe	Trp	Gln
				325					330					335	
Leu	Pro	Pro	Pro	Ala	Thr	Gln	Asn	Thr	Phe	Gly	Asn	Ser	Thr	Leu	Ala
			340					345					350		
Leu	Gly	Pro	Gly	Glu	Ser	Leu	Pro	His	Arg	Leu	Ser	Cys	Leu	Gly	Gln
		355					360					365			

Gln Gln Gln Glu Pro Pro Leu Ala Met Gly Thr Val Ser Leu Gly Gln
 370 375 380
 Leu Pro Leu Pro Pro Ile Pro His Val Phe Ser Ala Gly Thr Gly Ser
 385 390 395 400
 Ala Ile Leu Pro His Phe His His Ala Phe Arg
 405 410

<210> 90
 <211> 314
 <212> PRT
 <213> Homo sapiens

<400> 90
 Lys Arg Cys Gln Arg Lys Gln Pro Leu Arg Gly Ile Gly Ile Leu Lys
 1 5 10 15
 Gln Ala Ile Asp Lys Met Gln Met Asn Thr Asn Gln Leu Thr Ser Ile
 20 25 30
 His Ala Asp Leu Cys Gln Leu Cys Leu Leu Ala Lys Cys Phe Lys Pro
 35 40 45
 Ala Leu Pro Tyr Leu Asp Val Asp Met Met Asp Ile Cys Lys Glu Asn
 50 55 60
 Gly Ala Tyr Asp Ala Lys His Phe Leu Cys Tyr Tyr Tyr Tyr Gly Gly
 65 70 75 80
 Met Ile Tyr Thr Gly Leu Lys Asn Phe Glu Arg Ala Leu Tyr Phe Tyr
 85 90 95
 Glu Gln Ala Ile Thr Thr Pro Ala Met Ala Val Ser His Ile Met Leu
 100 105 110
 Glu Ser Tyr Lys Lys Tyr Ile Leu Val Ser Leu Ile Leu Leu Gly Lys
 115 120 125
 Val Gln Gln Leu Pro Lys Tyr Thr Ser Gln Ile Val Gly Arg Phe Ile
 130 135 140
 Lys Pro Leu Ser Asn Ala Tyr His Glu Leu Ala Gln Val Tyr Ser Thr
 145 150 155 160
 Asn Asn Pro Ser Glu Leu Arg Asn Leu Val Asn Lys His Ser Glu Thr
 165 170 175
 Phe Thr Arg Asp Asn Asn Met Gly Leu Val Lys Gln Cys Leu Ser Ser
 180 185 190
 Leu Tyr Lys Lys Asn Ile Gln Arg Leu Thr Lys Thr Phe Leu Thr Leu
 195 200 205
 Ser Leu Gln Asp Met Ala Ser Arg Val Gln Leu Ser Gly Pro Gln Glu
 210 215 220

Ala Glu Lys Tyr Val Leu His Met Ile Glu Asp Gly Glu Ile Phe Ala
 225 230 235 240

Ser Ile Asn Gln Lys Asp Gly Met Val Ser Phe His Asp Asn Pro Glu
 245 250 255

Lys Tyr Asn Asn Pro Ala Met Leu His Asn Ile Asp Gln Glu Met Leu
 260 265 270

Lys Cys Ile Glu Leu Asp Glu Arg Leu Lys Ala Met Asp Gln Glu Ile
 275 280 285

Thr Val Asn Pro Gln Phe Val Gln Lys Ser Met Gly Ser Gln Glu Asp
 290 295 300

Asp Ser Gly Asn Lys Pro Ser Ser Tyr Ser
 305 310

<210> 91
 <211> 58
 <212> PRT
 <213> Homo sapiens

<400> 91
 Val Leu Gln Glu Lys Ile Lys Ile Lys Lys Glu Lys Lys Glu Lys Ile
 1 5 10 15

Lys Phe Lys Asn Cys Phe Glu Asn Val Gln Ile Lys Ser Asn Ile Leu
 20 25 30

Ile Ile His Leu His Val Leu Leu Asn Ile Leu Ile Met Trp Met Phe
 35 40 45

Thr Leu Cys Met Ile Leu Ala Glu Tyr His
 50 55

<210> 92
 <211> 201
 <212> PRT
 <213> Homo sapiens

<400> 92
 Met Asp Leu Ser Leu Leu Trp Val Leu Leu Pro Leu Val Thr Met Ala
 1 5 10 15

Trp Gly Gln Tyr Gly Asp Tyr Gly Tyr Pro Tyr Gln Gln Tyr His Asp
 20 25 30

Tyr Ser Asp Asp Gly Trp Val Asn Leu Asn Arg Gln Gly Phe Ser Tyr
 35 40 45

Gln Cys Pro Gln Gly Gln Val Ile Val Ala Val Arg Ser Ile Phe Ser
 50 55 60

Lys Lys Glu Gly Ser Asp Arg Gln Trp Asn Tyr Ala Cys Met Pro Thr

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<210> 93
<211> 247
<212> PRT
<213> Homo sapiens
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<400> 93
Met Gly Asn Gly Leu Ser Glu Glu Arg Gly Asn Asn Phe Asn His Ile
  1           5           10           15

Ser Pro Ile Pro Pro Val Pro His Pro Arg Ser Val Ile Gln Gln Ala
          20           25           30

Glu Glu Lys Leu His Thr Pro Gln Lys Arg Leu Met Thr Pro Trp Glu
          35           40           45

Glu Ser Asn Val Met Gln Asp Lys Asp Ala Pro Ser Pro Lys Pro Arg
          50           55           60

Leu Ser Pro Arg Glu Thr Ile Phe Gly Lys Ser Glu His Gln Asn Ser
  65           70           75           80

Ser Pro Thr Cys Gln Glu Asp Glu Glu Asp Val Arg Tyr Asn Ile Val
          85           90           95

His Ser Leu Pro Pro Asp Ile Asn Asp Thr Glu Pro Val Thr Met Ile
          100          105          110

Phe Met Gly Tyr Gln Gln Ala Glu Asp Ser Glu Glu Asp Lys Lys Phe
          115          120          125

Leu Thr Gly Tyr Asp Gly Ile Ile His Ala Glu Leu Val Val Ile Asp

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130		135		140
Asp Glu Glu Glu Glu Asp Glu Gly Glu Ala Glu Lys Pro Ser Tyr His				
145		150		155
Pro Ile Ala Pro His Ser Gln Val Tyr Gln Pro Ala Lys Pro Thr Pro				
	165		170	175
Leu Pro Arg Lys Arg Ser Glu Ala Ser Pro His Glu Asn Thr Asn His				
	180		185	190
Lys Ser Pro His Lys Asn Ser Ile Ser Leu Lys Glu Gln Glu Glu Ser				
	195		200	205
Leu Gly Ser Pro Val His His Ser Pro Phe Asp Ala Gln Thr Thr Gly				
	210		215	220
Asp Gly Thr Glu Asp Pro Ser Leu Thr Ala Leu Arg Met Arg Met Ala				
225		230		235
Lys Leu Gly Lys Lys Val Ile				
	245			

<210> 94

<400> 94
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<210> 95

<211> 188

<212> PRT

<213> Homo sapiens

<400> 95

Met Pro Val Leu Arg Glu Tyr Leu Met Ser Gly Gly Ile Cys Pro Val				
1		5		10
Ser Arg Asp Thr Ile Asp Tyr Leu Leu Ser Lys Asn Gly Ser Gly Asn				
	20		25	30
Ala Ile Ile Ile Val Val Gly Gly Ala Ala Glu Ser Leu Ser Ser Met				
	35		40	45
Pro Gly Lys Asn Ala Val Thr Leu Arg Asn Arg Lys Gly Phe Val Lys				
	50		55	60
Leu Ala Leu Arg His Gly Ala Asp Leu Val Pro Ile Tyr Ser Phe Gly				
65		70		75
Glu Asn Glu Val Tyr Lys Gln Val Ile Phe Glu Glu Gly Ser Trp Gly				
	85		90	95
Arg Trp Val Gln Lys Lys Phe Gln Lys Tyr Ile Gly Phe Ala Pro Cys				
	100		105	110
Ile Phe His Gly Arg Gly Leu Phe Ser Ser Asp Thr Trp Gly Leu Val				

115	120	125
Pro Tyr Ser Lys Pro Ile Thr Thr Val Val Gly Glu Pro Ile Thr Ile		
130	135	140
Pro Lys Leu Glu His Pro Thr Gln Gln Asp Ile Asp Leu Tyr His Thr		
145	150	155
Met Tyr Met Glu Ala Leu Val Lys Leu Phe Asp Lys His Lys Thr Lys		
165	170	175
Phe Gly Leu Pro Glu Thr Glu Val Leu Glu Val Asn		
180	185	

<210> 96

<211> 290

<212> PRT

<213> Homo sapiens

<400> 96

Arg Gly Ala Gly Thr Gln Pro Gly Pro Leu Leu Lys Lys Pro Tyr Gln		
1	5	10
Pro Arg Ile Lys Ile Ser Lys Thr Ser Val Asp Gly Asp Pro His Phe		
20	25	30
Val Val Asp Phe Pro Leu Ser Arg Leu Thr Val Cys Phe Asn Ile Asp		
35	40	45
Gly Gln Pro Gly Asp Ile Leu Arg Leu Val Ser Asp His Arg Asp Ser		
50	55	60
Gly Val Thr Val Asn Gly Glu Leu Ile Gly Ala Pro Ala Pro Pro Asn		
65	70	75
Gly His Lys Lys Gln Arg Thr Tyr Leu Arg Thr Ile Thr Ile Leu Ile		
85	90	95
Asn Lys Pro Glu Arg Ser Tyr Leu Glu Ile Thr Pro Ser Arg Val Ile		
100	105	110
Leu Asp Gly Gly Asp Arg Leu Val Leu Pro Cys Asn Gln Ser Val Val		
115	120	125
Val Gly Ser Trp Gly Leu Glu Val Ser Val Ser Ala Asn Ala Asn Val		
130	135	140
Thr Val Thr Ile Gln Gly Ser Ile Ala Phe Val Ile Leu Ile His Leu		
145	150	155
Tyr Lys Lys Pro Ala Pro Phe Gln Arg His His Leu Gly Phe Tyr Ile		
165	170	175
Ala Asn Ser Glu Gly Leu Ser Ser Asn Cys His Gly Leu Leu Gly Gln		
180	185	190
Phe Leu Asn Gln Asp Ala Arg Leu Thr Glu Asp Pro Ala Gly Pro Ser		

195 200 205
 Gln Asn Leu Thr His Pro Leu Leu Leu Gln Val Gly Glu Gly Pro Glu
 210 215 220
 Ala Val Leu Thr Val Lys Gly His Gln Val Pro Val Val Trp Lys Gln
 225 230 235 240
 Arg Lys Ile Tyr Asn Gly Glu Glu Gln Ile Asp Cys Trp Phe Ala Arg
 245 250 255
 Asn Asn Ala Ala Lys Leu Ile Asp Gly Glu Tyr Lys Asp Tyr Leu Ala
 260 265 270
 Ser His Pro Phe Asp Thr Gly Met Thr Leu Gly Gln Gly Met Ser Arg
 275 280 285
 Glu Leu
 290

<210> 97
 <211> 66
 <212> PRT
 <213> Homo sapiens

<400> 97
 Asn Gln Phe Thr Ser Cys Ile Leu Phe Cys Asp Gly Gly His Trp Arg
 1 5 10 15
 Glu Leu Leu Phe Gln Ser Ile Met Ser Ser His Trp Thr Leu Lys Ile
 20 25 30
 Leu Leu Val Pro Leu Phe Tyr Leu Ser Leu Glu Phe Pro Ser Gly Phe
 35 40 45
 Val Leu Cys Leu Ala Asn Asp Leu Gly Tyr His Phe Ser Ser Arg Val
 50 55 60
 Arg Ser
 65

<210> 98
 <211> 54
 <212> PRT
 <213> Homo sapiens

<400> 98
 Val Pro Gly Ala Leu Pro Leu Ala Val Gly Pro Pro Pro Pro Pro Ser
 1 5 10 15
 Gly Phe Pro Arg Asn Val Gln Pro Arg Arg Pro Ser Gln Ser Leu Gly
 20 25 30
 Arg Val Met Ser Ala Gly Pro Asp Lys Arg Pro Leu Gly Thr Leu Cys
 35 40 45

Cys Phe Val Ser Phe Leu
50

<210> 99
<211> 49
<212> PRT
<213> Homo sapiens

<400> 99
Phe Phe Leu Tyr Phe Asn Gln Val Phe Tyr Trp Ser Gly Asn Cys Lys
1 5 10 15
Ile Tyr Lys Phe Leu Lys Gly Ile Ser Cys Leu Lys Ala Ser Ile Ala
20 25 30
Leu Tyr Pro Arg Ser Leu Ile Gln Thr Asn Thr Gln Asn Thr Glu Lys
35 40 45

Ser

<210> 100
<211> 98
<212> PRT
<213> Homo sapiens

<400> 100
Met Gly Asn Lys Glu Pro Gly Ser His Gly His Arg Ser Asp Ala Asp
1 5 10 15
Pro Ser Arg Phe Ser Pro Val Leu Pro Pro Ala Val Gln Leu Gly Val
20 25 30
Trp Arg Glu Glu Gly Arg Gly Gly Ser Cys Pro Phe Ser Trp Gly Arg
35 40 45
Gly Pro Val Ser Ser Thr Trp Leu Phe Pro Lys Gly Ser Lys Arg Glu
50 55 60
Gly Leu Gly Glu Lys Thr Met Glu Arg Gly Pro Ala Lys Glu Asn Arg
65 70 75 80
Glu Glu Val Ser Gly Leu Ile Ser Leu Leu Ser Arg Cys Ser Gly Ser
85 90 95
Leu Ile

<210> 101
<211> 117
<212> PRT
<213> Homo sapiens

<400> 101
Met Gly Lys Gly Leu Gly Glu Asp Gly Gln Gln Arg Ala Arg Glu Ser

1	5	10	15
Trp Thr Ser	Gln Arg Arg Arg Pro	Gln Gln Val Gln Ser Arg	Ala Ala
	20	25	30
Thr Ser Cys	Pro Ala Gly Cys Leu	Glu Gly Arg Gly Gln Arg Arg	Val
	35	40	45
Met Ser Leu	Gln Leu Gly Glu Gly Pro Ser	Glu Leu His Val Ala Phe	
	50	55	60
Ser Gln Arg	Glu Gln Glu Gly Arg Ile Gly	Arg Glu Asn Asn Gly Glu	
	65	70	75
Gly Thr Cys	Glu Gly Lys Gln Gly Gly Ser	Glu Arg Phe Asp Gln Pro	
	85	90	95
Ala Ile Thr	Val Phe Trp Leu Ser Tyr Leu	Ala Arg Arg Leu Arg Asp	
	100	105	110
Arg Tyr Ile	Thr Ser		
	115		

<210> 102

<211> 145

<212> PRT

<213> Homo sapiens

<400> 102

Met Asn Arg	Gly Pro Pro Thr Phe Trp Thr	Phe Glu Asp Arg Gly Ala
1	5	10
Lys Arg Asp	Arg Ser Ala Arg Gly Pro His Pro	Ala Pro Leu Gly Glu
	20	25
Pro Leu Leu	Thr Trp Val Ser Leu Arg Leu His	Gln Leu Val Gly Leu
	35	40
Gln Ala Ser	Pro Pro Asp Ser Pro His Cys Trp	Ala Thr Leu Asn Leu
	50	55
Lys Phe His	Cys Pro Ala Pro Pro Thr Pro Thr	Pro Lys Phe Pro Lys
	65	70
Glu Met Ser	Lys Thr His Ala His Thr Tyr Ile	His Thr Cys Thr Cys
	85	90
Ala His Thr	Ser Cys Val Thr Thr Gly Gln Gly	Asn Ala Ser Leu Arg
	100	105
Ile Pro Gly	Pro Gly Pro Gly Val Lys Gly Cys Ser	Gly Thr Leu Pro
	115	120
Pro Asn Leu	Leu Glu Asp Pro Glu Cys Gly Gly	Arg Ile Gly Cys Leu
	130	135
		140

Pro

145

<210> 103
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 103

Met	Arg	Thr	His	Val	Leu	Cys	Tyr	His	Trp	Pro	Arg	Lys	Arg	Glu	Ser
1				5					10					15	
Gln	Asp	Ser	Arg	Ala	Trp	Thr	Trp	Gly	Lys	Gly	Leu	Leu	Trp	Asp	Ser
			20					25					30		
Ala	Pro	Gln	Pro	Leu	Gly	Gly	Pro	Arg	Val	Trp	Gly	Gln	Asp	Trp	Val
		35					40					45			
Ser	Ala	Leu	Thr	His	Arg	Ile	Ser	Pro	Gly	Pro	Lys	Ala	Glu	Lys	Lys
	50					55					60				
Ser	Gly	Arg	Arg	Ser	Arg	Arg	Gln	Gly	Trp	Trp	Thr	Lys	Val	Gly	Val
65					70					75					80
Arg	Leu	Lys	Ser	Gly	Ser	Glu	Thr	Arg	Phe	Asp	His	Thr	His	His	Pro
				85					90					95	
Ser	Val	Pro	Pro	Gly	Gln	His	Ala	Pro	Leu	Glu	Pro	Leu	His	Arg	Leu
			100					105					110		
Ile	Arg	Thr	Arg	Gln	Asn	Leu	Leu	Leu	Thr	Asn	Leu	Leu	Arg	Ala	Val
	115						120					125			
Tyr	Arg	Gly	Ile	Thr	Leu	Val	Gln	Glu	Gly	Cys	Pro	Ser	Cys	Phe	His
	130					135					140				
Thr	Thr	Thr	Gly	Pro	Thr	Ile	Pro	Leu	Leu	Ala	Ser	Leu	Arg	Arg	Pro
145					150					155					160
Arg	Asp	Pro	Gln	Lys	Pro	Gly	Glu	Lys	Glu	Ser	Trp	Pro	Leu	Val	Ser
				165					170					175	
Thr	Ala	Phe	Arg	Ala	Thr	Gly	Gly	Asp	Ala	Gln	Met	Thr	Trp	Val	Lys
			180					185						190	
Gly	Leu	Ser	Gln	Thr											
				195											

<210> 104
 <211> 152
 <212> PRT
 <213> Homo sapiens

<400> 104

Ser	Glu	Ala	Arg	Asn	Ala	Pro	Ser	Gly	Thr	Ala	Gln	Thr	Phe	Ala	Met
1				5					10					15	

Gly Phe Met Thr Gly Thr Ile Ser Ser Met Tyr Gln Thr Lys Ala Val
 20 25 30
 Ile Ile Ala Met Ile Ile Thr Ala Val Val Ser Ile Ser Val Thr Ile
 35 40 45
 Phe Cys Phe Gln Thr Lys Val Asp Phe Thr Ser Cys Thr Gly Leu Phe
 50 55 60
 Cys Val Leu Gly Ile Val Leu Leu Val Thr Gly Ile Val Thr Ser Ile
 65 70 75 80
 Val Leu Tyr Phe Gln Tyr Val Tyr Trp Leu His Met Leu Tyr Ala Ala
 85 90 95
 Leu Gly Ala Ile Cys Phe Thr Leu Phe Leu Ala Tyr Asp Thr Gln Leu
 100 105 110
 Val Leu Gly Asn Arg Lys His Thr Ile Ser Pro Glu Asp Tyr Ile Thr
 115 120 125
 Gly Ala Leu Gln Ile Tyr Thr Asp Ile Ile Tyr Ile Phe Thr Phe Val
 130 135 140
 Leu Gln Leu Met Gly Asp Arg Asn
 145 150

<210> 105
 <211> 66
 <212> PRT
 <213> Homo sapiens

<400> 105
 His Leu Leu Ser Pro Pro His Ile Leu Gly Thr Ala Phe Ser Ser Thr
 1 5 10 15
 Gly Asn Gly Thr Asp Gly Gln Lys Thr Ser Ile Thr Phe Met Lys Gly
 20 25 30
 Leu Leu Glu Leu Pro Gly Lys Lys Ala Cys Leu Gly Glu Leu Gly Arg
 35 40 45
 Cys Arg Gln Cys Gly Trp Ala Gly Gly Gln Pro Val Val Leu Leu Pro
 50 55 60
 Ala Gln
 65

<210> 106
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 106
 Pro Thr Ser Leu Ile Trp Pro Thr Thr Met Phe Cys Ser Val His Val
 1 5 10 15

Leu Phe Lys Ser Ile Leu Asn Trp Leu Pro Ser Phe Lys Leu Asn Gln
 20 25 30
 Thr Leu Lys Ala Trp Ser Ser His Thr Gly Pro Thr Phe Pro His Gly
 35 40 45
 Asn Tyr Glu Arg Ala Pro Ala Gln Gln Gly Leu Ser Arg Ser Leu Pro
 50 55 60
 Pro Pro Leu Pro Val Pro Gln Ile Trp Pro Leu Leu Arg Lys Ile Arg
 65 70 75 80
 Thr Ala Thr Gly Pro Ser Glu Pro Lys Pro Thr
 85 90

<210> 107
 <211> 41
 <212> PRT
 <213> Homo sapiens

<400> 107
 Leu Leu Pro Ser Phe Phe Leu His Phe Ser Leu Ser Ile Tyr Phe Pro
 1 5 10 15
 His Pro Thr Phe Leu Glu Gln Pro Leu Val Leu Gln Glu Met Ala Leu
 20 25 30
 Met Asp Arg Arg Leu Ala Leu Pro Ser
 35 40

<210> 108
 <211> 471
 <212> PRT
 <213> Homo sapiens

<400> 108
 Asn Glu Leu Lys Ala Ser Gly Gly Glu Ile Lys Ile His Lys Met Glu
 1 5 10 15
 Gln Lys Glu Asn Val Pro Pro Gly Pro Glu Val Cys Ile Thr His Gln
 20 25 30
 Glu Gly Glu Lys Ile Ser Ala Asn Glu Asn Ser Leu Ala Val Arg Ser
 35 40 45
 Thr Pro Ala Glu Asp Asp Ser Arg Asp Ser Gln Val Lys Ser Glu Val
 50 55 60
 Gln Gln Pro Val His Pro Lys Pro Leu Ser Pro Asp Ser Arg Ala Ser
 65 70 75 80
 Ser Leu Ser Glu Ser Ser Pro Pro Lys Ala Met Lys Lys Phe Gln Ala
 85 90 95
 Pro Ala Arg Glu Thr Cys Val Glu Cys Gln Lys Thr Val Tyr Pro Met

100					105					110					
Glu	Arg	Leu	Leu	Ala	Asn	Gln	Gln	Val	Phe	His	Ile	Ser	Cys	Phe	Arg
		115					120					125			
Cys	Ser	Tyr	Cys	Asn	Asn	Lys	Leu	Ser	Leu	Gly	Thr	Tyr	Ala	Ser	Leu
	130					135					140				
His	Gly	Arg	Ile	Tyr	Cys	Lys	Pro	His	Phe	Asn	Gln	Leu	Phe	Lys	Ser
145					150					155					160
Lys	Gly	Asn	Tyr	Asp	Glu	Gly	Phe	Gly	His	Arg	Pro	His	Lys	Asp	Leu
				165					170					175	
Trp	Ala	Ser	Lys	Asn	Glu	Asn	Glu	Glu	Ile	Leu	Glu	Arg	Pro	Ala	Gln
			180					185					190		
Leu	Ala	Asn	Ala	Arg	Glu	Thr	Pro	His	Ser	Pro	Gly	Val	Glu	Asp	Ala
		195					200					205			
Pro	Ile	Ala	Lys	Gly	Gly	Val	Leu	Ala	Ala	Ser	Met	Glu	Ala	Lys	Ala
	210					215					220				
Ser	Ser	Gln	Gln	Glu	Lys	Glu	Asp	Lys	Pro	Ala	Glu	Thr	Lys	Lys	Leu
225					230					235					240
Arg	Ile	Ala	Trp	Pro	Pro	Pro	Thr	Glu	Leu	Gly	Ser	Ser	Gly	Ser	Ala
				245					250					255	
Leu	Glu	Glu	Gly	Ile	Lys	Met	Ser	Lys	Pro	Lys	Trp	Pro	Pro	Glu	Asp
			260					265					270		
Glu	Ile	Ser	Lys	Pro	Glu	Val	Pro	Glu	Asp	Val	Asp	Leu	Asp	Leu	Lys
		275					280					285			
Lys	Leu	Arg	Arg	Ser	Ser	Ser	Leu	Lys	Glu	Arg	Ser	Arg	Pro	Phe	Thr
	290					295					300				
Val	Ala	Ala	Ser	Phe	Gln	Ser	Thr	Ser	Val	Lys	Ser	Pro	Lys	Thr	Val
305					310					315					320
Ser	Pro	Pro	Ile	Arg	Lys	Gly	Trp	Ser	Met	Ser	Glu	Gln	Ser	Glu	Glu
				325					330					335	
Ser	Val	Gly	Gly	Arg	Val	Ala	Glu	Arg	Lys	Gln	Val	Glu	Asn	Ala	Lys
			340					345					350		
Ala	Ser	Lys	Lys	Asn	Gly	Asn	Val	Gly	Lys	Thr	Thr	Trp	Gln	Asn	Lys
		355					360					365			
Glu	Ser	Lys	Gly	Glu	Thr	Gly	Lys	Arg	Ser	Lys	Glu	Gly	His	Ser	Leu
		370				375					380				
Glu	Met	Glu	Asn	Glu	Asn	Leu	Val	Glu	Asn	Gly	Ala	Asp	Ser	Asp	Glu
385					390					395					400
Asp	Asp	Asn	Ser	Phe	Leu	Lys	Gln	Gln	Ser	Pro	Gln	Glu	Pro	Lys	Ser
				405					410					415	

Leu Asn Trp Ser Ser Phe Val Asp Asn Thr Phe Ala Glu Glu Phe Thr
 420 425 430
 Thr Gln Asn Gln Lys Ser Gln Asp Val Glu Leu Trp Glu Gly Glu Val
 435 440 445
 Val Lys Glu Leu Ser Val Glu Glu Gln Ile Lys Arg Asn Arg Tyr Tyr
 450 455 460
 Asp Glu Asp Glu Asp Glu Glu
 465 470

<210> 109

<400> 109
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<210> 110

<400> 110
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<210> 111

<400> 111
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<210> 112

<211> 94

<212> PRT

<213> Homo sapiens

<400> 112

Arg Lys Met Leu Arg Ala Ala Leu Pro Ala Leu Pro Ile Pro Arg Cys
 1 5 10 15
 Lys Tyr Thr Leu Phe Leu Ile Ala His Met Gly Pro Pro Tyr Leu Leu
 20 25 30
 Ala Leu Val Leu Met Leu Lys Ser Trp Pro Trp Glu Arg Cys Leu Pro
 35 40 45
 Gly Arg His Ser Cys Leu Val Gln Ala Lys Pro Leu Cys Asn Ala Ser
 50 55 60
 Pro Phe Trp Cys Tyr Glu Val Pro Leu Cys Arg Arg Phe His Gln Gln
 65 70 75 80
 Leu Val Thr Val Pro Ser Thr Arg Thr Cys Phe Glu Ile Ser
 85 90

<210> 113

<211> 324

<212> PRT

<213> Homo sapiens

<400> 113

Gly	Leu	Ser	Thr	Phe	Gln	Asn	Trp	Leu	Pro	Ser	Thr	Pro	Ala	Thr	Ser
1				5					10					15	
Trp	Gly	Gly	Leu	Thr	Ser	Ser	Arg	Thr	Thr	Asp	Asn	Gly	Gly	Glu	Gln
			20					25					30		
Thr	Ala	Leu	Ser	Pro	Gln	Glu	Ala	Pro	Phe	Ser	Gly	Ile	Ser	Thr	Pro
		35					40					45			
Pro	Asp	Val	Leu	Ser	Val	Gly	Pro	Glu	Pro	Ala	Trp	Glu	Ala	Ala	Ala
	50					55					60				
Thr	Thr	Lys	Gly	Leu	Ala	Thr	Asp	Val	Ala	Thr	Phe	Thr	Gln	Gly	Ala
65					70					75					80
Ala	Pro	Gly	Arg	Glu	Asp	Thr	Gly	Leu	Leu	Thr	Thr	Thr	His	Gly	Pro
				85					90					95	
Glu	Glu	Ala	Pro	Arg	Leu	Ala	Met	Leu	Gln	Asn	Glu	Leu	Glu	Gly	Leu
			100					105					110		
Gly	Asp	Ile	Phe	His	Pro	Met	Asn	Ala	Glu	Glu	Gln	Ala	Gln	Leu	Ala
	115						120					125			
Ala	Ser	Gln	Pro	Gly	Pro	Lys	Val	Leu	Ser	Ala	Glu	Gln	Gly	Ser	Tyr
	130					135					140				
Phe	Val	Arg	Leu	Gly	Asp	Leu	Gly	Pro	Ser	Phe	Arg	Gln	Arg	Ala	Phe
145					150					155					160
Glu	His	Ala	Val	Ser	His	Leu	Gln	His	Gly	Gln	Phe	Gln	Ala	Arg	Asp
				165					170					175	
Thr	Leu	Ala	Gln	Leu	Gln	Asp	Cys	Phe	Arg	Leu	Ile	Glu	Lys	Ala	Gln
			180					185					190		
Gln	Ala	Pro	Glu	Gly	Gln	Pro	Arg	Leu	Asp	Gln	Gly	Ser	Gly	Ala	Ser
		195					200					205			
Ala	Glu	Asp	Ala	Ala	Val	Gln	Glu	Glu	Arg	Asp	Ala	Gly	Val	Leu	Ser
	210					215					220				
Arg	Val	Cys	Gly	Leu	Leu	Arg	Gln	Leu	His	Thr	Ala	Tyr	Ser	Gly	Leu
225					230					235					240
Val	Ser	Ser	Leu	Gln	Gly	Leu	Pro	Ala	Glu	Leu	Gln	Gln	Pro	Val	Gly
			245						250					255	
Arg	Ala	Arg	His	Ser	Leu	Cys	Glu	Leu	Tyr	Gly	Ile	Val	Ala	Ser	Ala
			260					265					270		
Gly	Ser	Val	Glu	Glu	Leu	Pro	Ala	Glu	Arg	Leu	Val	Gln	Ser	Arg	Glu
		275					280					285			

Gly Val His Gln Ala Trp Gln Gly Leu Glu Gln Leu Leu Glu Gly Leu
 290 295 300

Gln His Asn Pro Pro Leu Ser Trp Leu Val Gly Pro Phe Ala Leu Pro
 305 310 315 320

Ala Gly Gly Gln

<210> 114

<211> 148

<212> PRT

<213> Homo sapiens

<400> 114

Ile Ala Met Thr Pro Pro Asn Ala Thr Glu Ala Ser Lys Pro Gln Gly
 1 5 10 15

Thr Thr Val Cys Pro Pro Cys Asp Asn Glu Leu Lys Ser Glu Ala Ile
 20 25 30

Ile Glu His Leu Cys Ala Ser Glu Phe Ala Leu Arg Met Lys Ile Lys
 35 40 45

Glu Val Lys Lys Glu Asn Gly Asp Lys Lys Ile Val Pro Lys Lys Lys
 50 55 60

Lys Pro Leu Lys Leu Gly Pro Ile Lys Lys Lys Asp Leu Lys Lys Leu
 65 70 75 80

Val Leu Tyr Leu Lys Asn Gly Ala Asp Cys Pro Cys His Gln Leu Asp
 85 90 95

Asn Leu Ser His His Phe Leu Ile Met Gly Arg Lys Val Lys Ser Gln
 100 105 110

Tyr Leu Leu Thr Ala Ile His Lys Trp Asp Lys Lys Asn Lys Glu Phe
 115 120 125

Lys Asn Phe Met Lys Lys Met Lys Asn His Glu Cys Pro Thr Phe Gln
 130 135 140

Ser Val Phe Lys
 145

<210> 115

<211> 45

<212> PRT

<213> Homo sapiens

<400> 115

Pro Val Ile Tyr Ser Val Leu Ile Arg Ser Glu Ile Arg Tyr Lys Ile
 1 5 10 15

Ser Arg Pro Val Thr Thr Asp Phe Ile Lys Ser Glu Ser Leu Ile Leu

20 25 30
 Ala Cys Leu Tyr Leu Ile Ser Glu Arg Met Ser Thr Leu
 35 40 45

<210> 116
 <211> 40
 <212> PRT
 <213> Homo sapiens

<400> 116
 Pro Asp Cys Glu Ser Phe Met Tyr Phe Asn Leu Asp Ser Val Phe Leu
 1 5 10 15
 Arg Val Leu Ser Met Lys Leu Ala Asp Ser Arg Gln Asp Ser Phe Phe
 20 25 30

His His Gly Trp Leu Ile Ser Pro
 35 40

<210> 117
 <211> 27
 <212> PRT
 <213> Homo sapiens

<400> 117
 Thr Asn Glu His Thr Leu Thr Ser Tyr Leu Gln Leu Pro Phe Ser Phe
 1 5 10 15
 Asn Arg Ile Val Lys Ala Ser Cys Ile Leu Ile
 20 25

<210> 118

<400> 118
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<210> 119
 <211> 135
 <212> PRT
 <213> Homo sapiens

<400> 119
 Arg Ser Asn Ala Val Gln Leu Thr Arg Met Glu Tyr Ala Met Lys Ser
 1 5 10 15
 Leu Ser Leu Leu Tyr Pro Lys Ser Leu Ser Arg His Val Ser Val Arg
 20 25 30
 Thr Ser Val Val Thr Gln Gln Leu Leu Ser Glu Pro Ser Pro Lys Ala
 35 40 45
 Pro Arg Ala Arg Pro Cys Arg Val Ser Thr Ala Asp Arg Ser Val Arg
 50 55 60

Lys Gly Ile Met Ala Tyr Ser Leu Glu Asp Leu Leu Leu Lys Val Arg
 65 70 75 80

Asp Thr Leu Met Leu Ala Asp Lys Pro Phe Phe Leu Val Leu Glu Glu
 85 90 95

Asp Gly Thr Thr Val Glu Thr Glu Glu Tyr Phe Gln Ala Leu Ala Gly
 100 105 110

Asp Thr Val Phe Met Val Leu Gln Lys Gly Gln Lys Trp Gln Pro Pro
 115 120 125

Ser Glu Gln Gly Thr Arg His
 130 135

<210> 120

<400> 120
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<210> 121

<400> 121
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<210> 122

<211> 193

<212> PRT

<213> Homo sapiens

<400> 122

Glu Ala Cys Ala His Thr Leu Ser Cys Pro Ala Leu Ala Arg Leu Gly
 1 5 10 15

Arg Ala Arg Arg Arg Pro Trp Met Ser His Arg Thr Ser Ser Thr Phe
 20 25 30

Arg Ala Glu Arg Ser Phe His Ser Ser Ser Ser Ser Ser Ala Ala
 35 40 45

Thr Ser Ser Ser Ala Ser Arg Ala Leu Pro Ala Gln Asp Pro Pro Met
 50 55 60

Glu Lys Ala Leu Ser Met Phe Ser Asp Asp Phe Gly Ser Phe Met Arg
 65 70 75 80

Pro His Ser Glu Pro Leu Ala Phe Pro Ala Arg Pro Gly Gly Ala Gly
 85 90 95

Asn Ile Lys Thr Leu Gly Asp Ala Tyr Glu Phe Ala Val Asp Val Arg
 100 105 110

Asp Phe Ser Pro Glu Asp Ile Ile Val Thr Thr Ser Asn Asn His Ile
 115 120 125

Glu Val Arg Ala Glu Lys Leu Ala Ala Asp Gly Thr Val Met Asn Thr
 130 135 140

Phe Ala His Lys Cys Gln Leu Pro Glu Asp Val Asp Pro Thr Ser Val
 145 150 155 160

Thr Ser Ala Leu Arg Glu Asp Gly Ser Leu Thr Ile Arg Ala Arg Arg
 165 170 175

His Pro His Thr Glu His Val Gln Gln Thr Phe Arg Thr Glu Ile Lys
 180 185 190

Ile

<210> 123

<400> 123
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<210> 124

<211> 38

<212> PRT

<213> Homo sapiens

<400> 124

Met Ala Thr Phe Tyr Pro Leu Phe Pro Asn Gly Gly Gly Thr Tyr Pro
 1 5 10 15

Glu Val Val Asn Asp Phe Pro Leu Lys Leu Leu Tyr Phe Thr Asn Leu
 20 25 30

Asn Tyr Phe Val Leu Met
 35

<210> 125

<211> 65

<212> PRT

<213> Homo sapiens

<400> 125

Met Trp Leu Phe His Asp Ala Gly Ile Arg Ser Ala Gly Gly Leu Ser
 1 5 10 15

Leu Leu Ser Cys Gly Ser Trp Pro Leu Pro Ser Gly Tyr His Arg Leu
 20 25 30

Gln Asp Thr Asn Gly Gln Gln Lys Asn Val Thr Leu Leu Ile Leu Ser
 35 40 45

Ser Ser Ser Ile Gly Thr Lys Leu Pro Ser Arg Pro Arg Glu Ile Leu
 50 55 60

Cys

65

<210> 126

<211> 250

<212> PRT

<213> Homo sapiens

<400> 126

Glu	Thr	Arg	Val	Lys	Thr	Ser	Leu	Glu	Leu	Leu	Arg	Thr	Gln	Leu	Glu
1				5					10					15	
Pro	Thr	Gly	Thr	Val	Gly	Asn	Thr	Ile	Met	Thr	Ser	Gln	Pro	Val	Pro
			20					25					30		
Asn	Glu	Thr	Ile	Ile	Val	Leu	Pro	Ser	Asn	Val	Ile	Asn	Phe	Ser	Gln
		35					40					45			
Ala	Glu	Lys	Pro	Glu	Pro	Thr	Asn	Gln	Gly	Gln	Asp	Ser	Leu	Lys	Lys
	50					55					60				
His	Leu	His	Ala	Glu	Ile	Lys	Val	Ile	Gly	Thr	Ile	Gln	Ile	Leu	Cys
65					70					75					80
Gly	Met	Met	Val	Leu	Ser	Leu	Gly	Ile	Ile	Leu	Ala	Ser	Ala	Ser	Phe
				85					90					95	
Ser	Pro	Asn	Phe	Thr	Gln	Val	Thr	Ser	Thr	Leu	Leu	Asn	Ser	Ala	Tyr
			100					105					110		
Pro	Phe	Ile	Gly	Pro	Phe	Phe	Phe	Ile	Ile	Ser	Gly	Ser	Leu	Ser	Ile
		115					120					125			
Ala	Thr	Glu	Lys	Arg	Leu	Thr	Lys	Leu	Leu	Val	His	Ser	Ser	Leu	Val
	130					135					140				
Gly	Ser	Ile	Leu	Ser	Ala	Leu	Ser	Ala	Leu	Val	Gly	Phe	Ile	Ile	Leu
145					150					155					160
Ser	Val	Lys	Gln	Ala	Thr	Leu	Asn	Pro	Ala	Ser	Leu	Gln	Cys	Glu	Leu
			165						170					175	
Asp	Lys	Asn	Asn	Ile	Pro	Thr	Arg	Ser	Tyr	Val	Ser	Tyr	Phe	Tyr	His
			180					185					190		
Asp	Ser	Leu	Tyr	Thr	Thr	Asp	Cys	Tyr	Thr	Ala	Lys	Ala	Ser	Leu	Ala
		195					200					205			
Gly	Thr	Leu	Ser	Leu	Met	Leu	Ile	Cys	Thr	Leu	Leu	Glu	Phe	Cys	Leu
	210					215						220			
Ala	Val	Leu	Thr	Ala	Val	Leu	Arg	Trp	Lys	Gln	Ala	Tyr	Ser	Asp	Phe
225					230					235					240
Pro	Gly	Val	Ser	Val	Leu	Ala	Gly	Phe	Thr						
				245					250						

<210> 127

<400> 127
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<210> 128

<211> 61

<212> PRT

<213> Homo sapiens

<400> 128

Met	His	Thr	Cys	Gln	Ile	Tyr	Ile	Tyr	Ser	Thr	Asn	Val	Thr	Phe	Leu
1				5					10					15	
Phe	Phe	Val	Leu	Asp	Val	Arg	Ala	Cys	Ser	Tyr	Val	Arg	Tyr	Leu	His
			20					25					30		
Lys	Leu	Leu	His	Tyr	Phe	Phe	Leu	Cys	Asn	Thr	Phe	Leu	Phe	Val	Tyr
		35					40					45			
Val	Val	Gln	Ile	Tyr	Ser	Phe	Leu	Lys	Leu	Leu	Lys	Lys			
	50					55					60				

<210> 129

<211> 211

<212> PRT

<213> Homo sapiens

<400> 129

Pro	Ala	Ser	Asn	Arg	Pro	Lys	Ser	Gly	Arg	Ala	Pro	Glu	Pro	Arg	Glu
1				5					10					15	
Pro	Ala	Arg	Arg	Ser	Ala	Gly	Gly	Ser	Pro	Pro	Pro	Pro	Pro	Trp	Pro
			20					25					30		
Arg	Val	Pro	Ala	Ala	Ala	Ala	Gly	Thr	Glu	Gly	Ala	Ser	Pro	Asp	Leu
		35					40					45			
Ala	Pro	Leu	Arg	Pro	Ala	Ala	Pro	Gly	Gln	Thr	Pro	Leu	Arg	Lys	Glu
	50					55					60				
Val	Leu	Lys	Ser	Lys	Met	Gly	Lys	Ser	Glu	Lys	Ile	Ala	Leu	Pro	His
	65				70					75				80	
Gly	Gln	Leu	Val	His	Gly	Ile	His	Leu	Tyr	Glu	Gln	Pro	Lys	Ile	Asn
				85					90					95	
Arg	Gln	Lys	Ser	Lys	Tyr	Asn	Leu	Pro	Leu	Thr	Lys	Ile	Thr	Ser	Ala
			100					105					110		
Lys	Arg	Asn	Glu	Asn	Asn	Phe	Trp	Gln	Asp	Ser	Val	Ser	Ser	Asp	Arg
		115					120					125			
Ile	Gln	Lys	Gln	Glu	Lys	Lys	Pro	Phe	Lys	Asn	Thr	Glu	Asn	Ile	Lys
	130					135					140				

Asn Ser His Leu Lys Lys Ser Ala Phe Leu Thr Glu Val Ser Gln Lys
 145 150 155 160

Glu Asn Tyr Ala Gly Ala Lys Phe Ser Asp Pro Pro Ser Pro Ser Val
 165 170 175

Leu Pro Lys Pro Pro Ser His Trp Met Gly Ser Thr Val Glu Asn Ser
 180 185 190

Asn Gln Asn Arg Glu Leu Met Ala Val His Leu Lys Thr Leu Leu Lys
 195 200 205

Val Gln Thr
 210

<210> 130

<400> 130
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<210> 131

<211> 48

<212> PRT

<213> Homo sapiens

<400> 131

Met Ile Leu Thr Asn Pro Leu Lys Ser Lys Thr Asp Thr Phe Ile Asn
 1 5 10 15

Arg Ser Ile Cys Lys Gln Ser Gln Tyr Ala Leu Gly Arg Leu Thr Ile
 20 25 30

Phe Leu Thr Cys Gln Gly Val Leu Pro Ser Gln Gln Thr Pro Leu Ile
 35 40 45

<210> 132

<211> 78

<212> PRT

<213> Homo sapiens

<400> 132

Leu Gly Ile Phe Leu His Gln Tyr Val Ile Phe Asn Gln Asn Val Lys
 1 5 10 15

Phe Leu Leu Asn Ser Leu Pro Ala Ile Val Ile Val Pro Ser Trp Pro
 20 25 30

Thr Trp Phe Pro Asp Val Val Asn Asn Ile Asn Ala Ser Ala Val Gly
 35 40 45

Pro Leu Leu Arg Cys Leu Arg Arg Asn Phe Val Leu Ala Ile Ser Ile
 50 55 60

Asn Phe Val Phe Tyr Leu Gln Phe Gly Arg Arg Lys Val Thr
 65 70 75

<210> 133
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 133
 Met Asp Met Ala Lys Thr Lys Phe Leu Arg Arg His Leu Ser Lys Gly
 1 5 10 15
 Pro Thr Ala Asp Ala Leu Met Leu Phe Thr Thr Ser Gly Asn Gln Val
 20 25 30
 Gly His Asp Gly Thr Ile Thr Met Ala Gly Asn Glu Phe Asn Lys Asn
 35 40 45
 Phe Thr Phe Trp Leu Lys Ile Thr Tyr Trp Cys Lys Lys Ile Pro Asn
 50 55 60
 Gln Ile Lys Ser Tyr Cys Phe Asp
 65 70

<210> 134

<400> 134
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<210> 135
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 135
 Leu Asn Val Phe Ser Ser Leu Gln Ile Ser Glu Leu Ile Phe Pro Pro
 1 5 10 15
 Leu Pro Met Trp His Pro Leu Pro Arg Lys Lys Pro Gly Met Tyr Arg
 20 25 30
 Gly Asn Gly His Gln Asn His Tyr Pro Pro Pro Val Pro Phe Gly Tyr
 35 40 45
 Pro Asn Gln Gly Arg Lys Asn Lys Pro Tyr Arg Pro Ile Pro Val Thr
 50 55 60
 Trp Val Pro Pro Pro Gly Met His Cys Asp Arg Asn His Trp Ile Asn
 65 70 75 80
 Pro His Met Leu Ala Pro His
 85

<210> 136

<400> 136

000

<210> 137
 <211> 83
 <212> PRT
 <213> Homo sapiens

<400> 137
 Met Tyr Gly Asn Ile Leu Cys Pro Thr Leu His Thr Pro Cys Thr Gln
 1 5 10 15
 Ile Leu Tyr Cys Met Asn Tyr Ala Leu Ser Arg Ile Gln Cys Gln Gly
 20 25 30
 Glu Leu Gly Glu Ile Asn Tyr Phe Asn Phe Phe Phe Ile Leu Tyr Lys
 35 40 45
 Ala Met Asp Phe Ile Trp Leu Met Cys Ala Leu Tyr Thr Ser His Phe
 50 55 60
 Asn Arg Met Glu Leu Leu Ile Ile Phe Gln Arg Val Ile Asp Met Gln
 65 70 75 80
 Lys Phe Gln

<210> 138
 <211> 366
 <212> PRT
 <213> Homo sapiens

<400> 138
 Arg Pro Lys Pro Gly His Pro Leu Tyr Ser Lys Tyr Met Arg Gly Asp
 1 5 10 15
 Val Leu Val Met Leu Lys Gln Thr Glu Asn Asn Tyr Leu Glu Cys Gln
 20 25 30
 Lys Gly Glu Asp Thr Gly Arg Val His Leu Ser Gln Met Lys Ile Ile
 35 40 45
 Thr Pro Leu Asp Glu His Leu Arg Ser Arg Pro Asn Asp Pro Ser His
 50 55 60
 Ala Gln Lys Pro Val Asp Ser Gly Ala Pro His Ala Val Val Leu His
 65 70 75 80
 Asp Phe Pro Ala Glu Gln Val Asp Asp Leu Asn Leu Thr Ser Gly Glu
 85 90 95
 Ile Val Tyr Leu Leu Glu Lys Ile Asp Thr Asp Trp Tyr Arg Gly Asn
 100 105 110
 Cys Arg Asn Gln Ile Gly Ile Phe Pro Ala Asn Tyr Val Lys Val Ile
 115 120 125

Ile Asp Ile Pro Glu Gly Gly Asn Gly Lys Arg Glu Cys Val Ser Ser
 130 135 140
 His Cys Val Lys Gly Ser Arg Cys Val Ala Arg Phe Glu Tyr Ile Gly
 145 150 155 160
 Glu Gln Lys Asp Glu Leu Ser Phe Ser Glu Gly Glu Ile Ile Ile Leu
 165 170 175
 Lys Glu Tyr Val Asn Glu Glu Trp Ala Arg Gly Glu Val Arg Gly Arg
 180 185 190
 Thr Gly Ile Phe Pro Leu Asn Phe Val Glu Pro Val Glu Asp Tyr Pro
 195 200 205
 Thr Ser Gly Ala Asn Val Leu Ser Thr Lys Val Pro Leu Lys Thr Lys
 210 215 220
 Lys Glu Asp Ser Gly Ser Asn Ser Gln Val Asn Ser Leu Pro Ala Glu
 225 230 235 240
 Trp Cys Glu Ala Leu His Ser Phe Thr Ala Glu Thr Ser Asp Asp Leu
 245 250 255
 Ser Phe Lys Arg Gly Asp Arg Ile Gln Ile Leu Glu Arg Leu Asp Ser
 260 265 270
 Asp Trp Cys Arg Gly Arg Leu Gln Asp Arg Glu Gly Ile Phe Pro Ala
 275 280 285
 Val Phe Val Arg Pro Cys Pro Ala Glu Ala Lys Ser Met Leu Ala Ile
 290 295 300
 Val Pro Lys Gly Arg Lys Ala Lys Ala Leu Tyr Asp Phe Arg Gly Glu
 305 310 315 320
 Asn Glu Asp Glu Leu Ser Phe Lys Ala Gly Asp Ile Ile Thr Glu Leu
 325 330 335
 Glu Ser Val Asp Asp Asp Trp Met Ser Gly Glu Leu Met Gly Lys Ser
 340 345 350
 Gly Ile Phe Pro Lys Asn Tyr Ile Gln Phe Leu Gln Ile Ser
 355 360 365

<210> 139

<211> 68

<212> PRT

<213> Homo sapiens

<400> 139

Met Asn Pro Tyr Ile Ser Ile Ile Val Phe Ile Val Phe Leu Cys Ser
 1 5 10 15

Glu Asn Tyr Pro Trp Asn Asn Met Leu Arg Ile Thr Gly Ser Ser Pro
 20 25 30

Tyr Leu His Phe Leu Ser Val Leu Gly Val Leu Val Asn Ser Tyr Val
 35 40 45

Leu Ile Leu Phe Asn Ser Glu Phe Leu Thr Gln His Phe Arg Glu Arg
 50 55 60

Ile Gln Ala Gly
 65

<210> 140

<211> 28

<212> PRT

<213> Homo sapiens

<400> 140

Phe Phe Phe Phe Phe Phe Leu Leu Leu Lys Phe Phe Phe Asn Lys Asp
 1 5 10 15

Lys Gly Phe Asn Asn Phe Cys Ala Thr Ile Leu Asn
 20 25

<210> 141

<211> 22

<212> PRT

<213> Homo sapiens

<400> 141

Glu Gly Thr Thr Arg Lys Lys Asp Lys Tyr Ile Leu Ser Leu Glu Asn
 1 5 10 15

Ala Ser Arg Gln Lys Tyr
 20

<210> 142

<211> 46

<212> PRT

<213> Homo sapiens

<400> 142

Met Pro Phe Leu Arg Lys Phe Asp Arg Leu Val Arg Thr Ser Asp His
 1 5 10 15

Gln Ile Ser Leu Lys Trp Val Ser Trp Asn Phe Ile Phe Asp Asn Ile
 20 25 30

Tyr Thr Ile Pro Asn Ser Phe Ala Val Leu Arg Phe Val Gly
 35 40 45

<210> 143

<211> 56

<212> PRT

<213> Homo sapiens

<400> 143

Met Glu Gly Trp Gly Met Ser Ser Ile Asn Pro Tyr Gly Met His Ser
 1 5 10 15
 Gln Trp Pro Ser His Leu Gly Leu Glu Pro Leu Val Gln Gly Leu Gly
 20 25 30
 Glu Asn Arg Pro His Gly Asn Ser His Thr Val Ile Ala Phe Asn Thr
 35 40 45
 Glu Pro Arg Val Pro Lys Gln Gln
 50 55

<210> 144
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 144
 Met Asn Ile Ser Thr Gln Gly Arg Ala Lys Gly Val Pro Arg Ile Leu
 1 5 10 15
 Leu Ala Lys Gly Gln Val Leu Ile Glu Gly Leu Glu Leu Ser Arg Phe
 20 25 30
 Met Glu Ala Ala Cys Thr Leu Gly Ala Cys Pro Asp Ser Ser Leu Gly
 35 40 45
 Phe Pro Phe Tyr Leu Ser Ser Phe
 50 55

<210> 145
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 145
 Met Pro Lys Gly Lys Ala Phe Arg Arg Thr Leu Arg Ile Thr Ser Leu
 1 5 10 15
 Phe Phe Ser Ser Leu Leu Leu Leu Gln Leu Leu Phe Gly His His Leu
 20 25 30
 Leu Val Leu Val Ser Pro Gln Leu Pro Gly Ala Val Phe Glu Gly Glu
 35 40 45
 Ala Phe Ser Val Pro Pro Pro Gln Ala Leu Pro Met Met Ala Pro Ser
 50 55 60
 His His Pro Ser Pro Ala Pro Leu Pro Ala Ser Pro Pro Pro Pro Ala
 65 70 75 80
 Pro Pro Pro Pro Trp Arg Arg Arg Gly Ile Pro Leu Ala Phe Gly Leu
 85 90 95
 Pro Arg Ser Arg Arg Leu Pro Glu Leu Pro Gln Pro Arg
 100 105

<210> 146
 <211> 247
 <212> PRT
 <213> Homo sapiens

<400> 146

Arg	Pro	Ala	Pro	Ala	Pro	Arg	Cys	Gln	Leu	Pro	Gln	Arg	Pro	Ala	Glu
1				5					10					15	
Ala	Arg	Cys	Met	Leu	Ser	Arg	Cys	Arg	Ser	Arg	Leu	Leu	His	Val	Leu
			20					25					30		
Gly	Leu	Ser	Phe	Leu	Leu	Gln	Thr	Arg	Arg	Pro	Ile	Leu	Leu	Cys	Ser
		35					40					45			
Pro	Arg	Leu	Met	Lys	Pro	Leu	Val	Val	Phe	Val	Leu	Gly	Gly	Pro	Gly
	50					55					60				
Ala	Gly	Lys	Gly	Thr	Gln	Cys	Ala	Arg	Ile	Val	Glu	Lys	Tyr	Gly	Tyr
65					70					75					80
Thr	His	Leu	Ser	Ala	Gly	Glu	Leu	Leu	Arg	Asp	Glu	Arg	Lys	Asn	Pro
				85					90					95	
Asp	Ser	Gln	Tyr	Gly	Glu	Leu	Ile	Glu	Lys	Tyr	Ile	Lys	Glu	Gly	Lys
			100					105					110		
Ile	Val	Pro	Val	Glu	Ile	Thr	Ile	Ser	Leu	Leu	Lys	Arg	Glu	Met	Asp
		115					120					125			
Gln	Thr	Met	Ala	Ala	Asn	Ala	Gln	Lys	Asn	Lys	Phe	Leu	Ile	Asp	Gly
		130				135					140				
Phe	Pro	Arg	Asn	Gln	Asp	Asn	Leu	Gln	Gly	Trp	Asn	Lys	Thr	Met	Asp
145					150					155				160	
Gly	Lys	Ala	Asp	Val	Ser	Phe	Val	Leu	Phe	Phe	Asp	Cys	Asn	Asn	Glu
			165						170					175	
Ile	Cys	Ile	Glu	Arg	Cys	Leu	Glu	Arg	Gly	Lys	Ser	Ser	Gly	Arg	Ser
		180						185					190		
Asp	Asp	Asn	Arg	Glu	Ser	Leu	Glu	Lys	Arg	Ile	Gln	Thr	Tyr	Leu	Gln
		195					200					205			
Ser	Thr	Lys	Pro	Ile	Ile	Asp	Leu	Tyr	Glu	Glu	Met	Gly	Lys	Val	Lys
	210					215					220				
Lys	Ile	Asp	Ala	Ser	Lys	Ser	Val	Asp	Glu	Val	Phe	Asp	Glu	Val	Val
225					230					235					240
Gln	Ile	Phe	Asp	Lys	Glu	Gly									
				245											

<210> 147

<211> 181
 <212> PRT
 <213> Homo sapiens

<400> 147

Ile	Pro	Asn	Met	Ala	Ala	Pro	Leu	Gly	Gly	Met	Phe	Ser	Gly	Gln	Pro
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Pro	Gly	Pro	Pro	Gln	Ala	Pro	Pro	Gly	Leu	Pro	Gly	Gln	Ala	Ser	Leu
			20					25					30		
Leu	Gln	Ala	Ala	Pro	Gly	Ala	Pro	Arg	Pro	Ser	Ser	Ser	Thr	Leu	Val
		35					40					45			
Asp	Glu	Leu	Glu	Ser	Ser	Phe	Glu	Ala	Cys	Phe	Ala	Ser	Leu	Val	Ser
	50					55					60				
Gln	Asp	Tyr	Val	Asn	Gly	Thr	Asp	Gln	Glu	Glu	Ile	Arg	Thr	Gly	Val
65					70					75					80
Asp	Gln	Cys	Ile	Gln	Lys	Phe	Leu	Asp	Ile	Ala	Arg	Gln	Thr	Glu	Cys
				85					90					95	
Phe	Phe	Leu	Gln	Lys	Arg	Leu	Gln	Leu	Ser	Val	Gln	Lys	Pro	Glu	Gln
		100					105						110		
Val	Ile	Lys	Glu	Asp	Val	Ser	Glu	Leu	Arg	Asn	Glu	Leu	Gln	Arg	Lys
		115					120					125			
Asp	Ala	Leu	Val	Gln	Lys	His	Leu	Thr	Lys	Leu	Arg	His	Trp	Gln	Gln
	130					135					140				
Val	Leu	Glu	Asp	Ile	Asn	Val	Gln	His	Lys	Lys	Pro	Ala	Asp	Ile	Pro
145					150					155					160
Gln	Gly	Ser	Leu	Ala	Tyr	Leu	Glu	Gln	Ala	Ser	Ala	Asn	Ile	Pro	Ala
			165					170						175	
Pro	Leu	Lys	Pro	Thr											
			180												

<210> 148
 <211> 236
 <212> PRT
 <213> Homo sapiens

<400> 148

Met	Leu	Arg	Asp	Leu	Gln	Leu	Gln	Ile	Leu	Arg	Asn	Val	Thr	His	His
1				5					10					15	
Val	Ser	Val	Thr	Lys	Gln	Leu	Pro	Thr	Ser	Glu	Ala	Val	Val	Ser	Ala
			20					25					30		
Val	Ser	Glu	Ala	Gly	Ala	Ser	Gly	Ile	Thr	Glu	Ala	Gln	Ala	Arg	Ala
		35					40					45			
Ile	Val	Asn	Ser	Ala	Leu	Lys	Leu	Tyr	Ser	Gln	Asp	Lys	Thr	Gly	Met

50	55	60
Val Asp Phe Ala Leu Glu Ser Gly Gly Gly Ser Ile Leu Ser Thr Arg		
65	70	75 80
Cys Ser Glu Thr Tyr Glu Thr Lys Thr Ala Leu Met Ser Leu Phe Gly		
	85	90 95
Ile Pro Leu Trp Tyr Phe Ser Gln Ser Pro Arg Val Val Ile Gln Pro		
	100	105 110
Asp Ile Tyr Pro Gly Asn Cys Trp Ala Phe Lys Gly Ser Gln Gly Tyr		
	115	120 125
Leu Val Val Arg Leu Ser Met Met Ile His Pro Ala Ala Phe Thr Leu		
	130	135 140
Glu His Ile Pro Lys Thr Leu Ser Pro Thr Gly Asn Ile Ser Ser Ala		
145	150	155 160
Pro Lys Asp Phe Ala Val Tyr Gly Leu Glu Asn Glu Tyr Gln Glu Glu		
	165	170 175
Gly Gln Leu Leu Gly Gln Phe Thr Tyr Asp Gln Asp Gly Glu Ser Leu		
	180	185 190
Gln Met Phe Gln Ala Leu Lys Arg Pro Asp Asp Thr Ala Phe Gln Ile		
	195	200 205
Val Glu Leu Arg Ile Phe Ser Asn Trp Gly His Pro Glu Tyr Thr Cys		
	210	215 220
Leu Tyr Arg Phe Arg Val His Gly Glu Pro Val Lys		
225	230	235

<210> 149

<211> 57

<212> PRT

<213> Homo sapiens

<400> 149

Met Glu Trp Ser Pro Ser Ala Ser Leu Phe Asn Pro His Ile Trp Ser		
1	5	10 15
Thr Arg Val Asp Leu Trp Leu Thr Thr Tyr Thr Met Leu Lys Ser Ser		
	20	25 30
Ala Thr Ala Thr Thr Ser Cys Gln Lys Val Ser Leu Ala Asn Lys Gln		
	35	40 45
Leu Lys Phe Lys Gly Arg Ser Lys Ser		
50	55	

<210> 150

<211> 52

<212> PRT

<213> Homo sapiens

<400> 150

Met His Leu Ala Leu Thr Ser Tyr Ser Ile Leu Pro Val Thr Val Val
 1 5 10 15

Lys Ser Arg Ser Lys Ile Asn Lys Thr Phe Leu Thr Asn Ser Cys Thr
 20 25 30

Ile Phe Ser Phe Val Leu Pro Val Asp Glu Lys Ser Gly Leu Arg Gln
 35 40 45

Ala Ser Tyr Phe
 50

<210> 151

<211> 377

<212> PRT

<213> Homo sapiens

<400> 151

Leu Arg Arg Phe Pro Ala Gln Ser Ser Pro Ala Pro Arg Arg Ala Pro
 1 5 10 15

Glu Gln Arg Pro Pro Ala Gly Pro Ala Ser Ala Trp Ser Ser Ser Tyr
 20 25 30

Pro His Ala Pro Tyr Leu Gly Ser Ala Arg Ser Leu Ser Pro His Lys
 35 40 45

Met Ala Asp Gly Gly Ser Pro Phe Leu Gly Arg Arg Asp Phe Val Tyr
 50 55 60

Pro Ser Ser Thr Arg Asp Pro Ser Ala Ser Asn Gly Gly Gly Ser Pro
 65 70 75 80

Ala Arg Arg Glu Glu Lys Lys Arg Lys Ala Ala Arg Leu Lys Phe Asp
 85 90 95

Phe Gln Ala Gln Ser Pro Lys Glu Leu Thr Leu Gln Lys Gly Asp Ile
 100 105 110

Val Tyr Ile His Lys Glu Val Asp Lys Asn Trp Leu Glu Gly Glu His
 115 120 125

His Gly Arg Leu Gly Ile Phe Pro Ala Asn Tyr Val Glu Val Leu Pro
 130 135 140

Ala Asp Glu Ile Pro Lys Pro Ile Lys Pro Pro Thr Tyr Gln Val Leu
 145 150 155 160

Glu Tyr Gly Glu Ala Val Ala Gln Tyr Thr Phe Lys Gly Asp Leu Glu
 165 170 175

Val Glu Leu Ser Phe Arg Lys Gly Glu His Ile Cys Leu Ile Arg Lys
 180 185 190

Val Asn Glu Asn Trp Tyr Glu Gly Arg Ile Thr Gly Thr Gly Arg Gln
 195 200 205
 Gly Ile Phe Pro Ala Ser Tyr Val Gln Val Ser Arg Glu Pro Arg Leu
 210 215 220
 Arg Leu Cys Asp Asp Gly Pro Gln Leu Pro Thr Ser Pro Arg Leu Thr
 225 230 235 240
 Ala Ala Ala Arg Ser Ala Arg Asp Pro Ser Ala Pro Ser Ala Leu Arg
 245 250 255
 Ser Pro Ala Asp Pro Thr Asp Leu Gly Gly Gln Thr Ser Pro Arg Arg
 260 265 270
 Thr Gly Phe Ser Phe Pro Thr Gln Glu Pro Arg Pro Gln Thr Gln Asn
 275 280 285
 Leu Gly Thr Pro Gly Pro Ala Leu Ser His Ser Arg Gly Pro Ser His
 290 295 300
 Pro Leu Asp Leu Gly Thr Ser Ser Pro Asn Thr Ser Gln Ile His Trp
 305 310 315 320
 Thr Pro Tyr Arg Ala Met Tyr Gln Tyr Arg Pro Gln Asn Glu Asp Glu
 325 330 335
 Leu Glu Leu Arg Glu Gly Asp Arg Val Asp Val Met Gln Gln Cys Asp
 340 345 350
 Asp Gly Trp Phe Val Gly Val Ser Arg Arg Thr Gln Lys Phe Gly Thr
 355 360 365
 Phe Pro Gly Asn Tyr Val Ala Pro Val
 370 375

<210> 152

<211> 29

<212> PRT

<213> Homo sapiens

<400> 152

Trp Asp Pro Thr Leu Ser Pro Val Gly Val Leu Gly Pro Gly Ser Ile
 1 5 10 15

Leu Gly Cys Gly Pro Gly Lys Gly Ser Pro Gly Ala Lys
 20 25

<210> 153

<211> 58

<212> PRT

<213> Homo sapiens

<400> 153

Met Gln Glu Ala Met Val Lys Thr His Phe His Pro Thr Ser Arg Arg
 1 5 10 15

Ser Leu Ala Tyr His Thr Leu Leu Pro Ile Pro Ser Glu Pro Leu Phe
 20 25 30

Ala Ala Pro Gly Glu His Leu His Gln Cys Phe Val Lys Glu Ser Tyr
 35 40 45

Cys Pro Pro Arg Val Leu Ala Lys Glu Gln
 50 55

<210> 154

<211> 41

<212> PRT

<213> Homo sapiens

<400> 154

Gly Gly Glu Pro Gly Leu Arg Gly Ser Gly Thr Arg Pro Cys Leu Gln
 1 5 10 15

Trp Ala Ser Trp Ala Pro Ala Leu Phe Trp Ala Ala Gly Leu Gly Arg
 20 25 30

Ala Arg Arg Val Pro Asn Glu Leu Ser
 35 40

<210> 155

<211> 75

<212> PRT

<213> Homo sapiens

<400> 155

Met Met Leu Gly Ser Leu Ala Pro Asp Pro Gly Ser Arg Arg His Ser
 1 5 10 15

Gly Gln Ala Ala Leu Arg Pro Arg Arg Tyr Pro Thr Leu Trp Asp Arg
 20 25 30

Cys Arg Lys Arg Trp Leu Arg Pro Ile Phe Thr Gln Leu Leu Ala Ala
 35 40 45

Val Trp Leu Thr Thr Arg Ser Ser Pro Phe Pro Val Ser Arg Phe Leu
 50 55 60

Gln His Gln Ala Asn Thr Tyr Thr Ser Ala Leu
 65 70 75

<210> 156

<211> 50

<212> PRT

<213> Homo sapiens

<400> 156

Gly Ala Ser Arg Ala Cys Ala Val Val Gly Pro Asp Pro Val Ser Ser
 1 5 10 15

Gly Arg Leu Gly Pro Arg Leu Tyr Ser Gly Leu Arg Ala Trp Glu Gly
 20 25 30

Leu Ala Gly Cys Gln Met Ser Cys Pro Asn Ser Ala Gly Leu Gln Leu
 35 40 45

Pro Ala
 50

<210> 157

<211> 97

<212> PRT

<213> Homo sapiens

<400> 157

Gly Thr Pro Gly Pro Tyr Pro Gly Pro Leu Ser Pro Pro Pro Glu Ala
 1 5 10 15

Pro Pro Leu Glu Ser Ala Glu Pro Leu Gly Pro Ala Ala Asp Leu Trp
 20 25 30

Ala Asp Val Asp Leu Thr Glu Phe Asp Gln Tyr Leu Asn Cys Ser Arg
 35 40 45

Thr Arg Pro Asp Ala Pro Gly Leu Pro Tyr His Val Ala Leu Ala Lys
 50 55 60

Leu Gly Pro Arg Ala Met Ser Cys Pro Glu Glu Ser Ser Leu Ile Ser
 65 70 75 80

Ala Leu Ser Asp Ala Ser Ser Ala Val Tyr Tyr Ser Ala Cys Ile Ser
 85 90 95

Gly

<210> 158

<211> 173

<212> PRT

<213> Homo sapiens

<400> 158

Gly Leu Phe Pro Ala Val Cys Pro Trp Pro Ala Leu Asp Leu Leu Ser
 1 5 10 15

Gly Pro Gln Trp Gln Arg Gly Pro Gly Pro Gly Ala Gly Val Gly Asp
 20 25 30

Pro Gly Leu Ser Ala Val Ala Phe Trp Trp Gly Ala Met Glu Thr Gly
 35 40 45

Asn Gln Ala Val Gly Ser Gln Arg Trp Ser Leu Arg Gly Glu Trp Arg
 50 55 60

Ala Phe Cys Phe Cys Leu Val Pro Pro His Gly Thr Trp Phe Pro Gly
 65 70 75 80

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<210> 159
<211> 109
<212> PRT
<213> Homo sapiens
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<210> 160
<211> 152
<212> PRT
<213> Homo sapiens
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<400> 160
Asn Ile Arg Gly Asn Gln His Leu Lys Asn Arg Leu His Glu Arg Arg
  1                               5                10                15
Ala Ala Arg Arg Gly Ser Ala Pro Pro Thr Thr Pro Thr Ala Glu Asp

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20	25	30
Thr Glu Arg Pro Gly Ala Pro Ser Trp Phe Pro Leu Val Pro Asn Glu		
35	40	45
Thr Glu Arg Leu Lys Glu Leu Pro Gly Met Val Thr Ala Glu Lys Lys		
50	55	60
Ser Ser Glu Trp Leu His Ala Ala Ala Cys Val His Leu Pro Ser		
65	70	75
Thr Gln Asp Ser Pro Arg Gln Gln Leu Val Phe Thr Cys Pro Pro Pro		
85	90	95
Arg Thr Val Pro Gly Leu Ala Pro Gly Cys Arg Gly Ser Ala Glu Gly		
100	105	110
Ala Ser Cys Pro Ile Ser Leu Ala Asn Ser Leu Leu Leu Gly Pro		
115	120	125
His Lys Arg His Gly Arg Met Phe Leu Ile Arg Gln Glu His Arg Thr		
130	135	140
Pro Asn Pro Ser Leu Cys Leu Ala		
145	150	

<210> 161

<211> 3096

<212> DNA

<213> Homo sapiens

<400> 161

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cgccgccacc atgaacaaga agaagaaacc gttcctaggg atgcccgcg ccttcggcta 180
cgtgccgggg ctgggccggg gcgccactgg cttcaccacg cggtcagaca ttgggcccgc 240
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<210> 162

<211> 1987

<212> DNA

<213> Homo sapiens

<400> 162

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ttatttatgt agtcaactgta tttctggatt tttaaattaa taaaaaagtt aattttgaaa 1920
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<210> 163

<211> 1107

<212> DNA

<213> Homo sapiens

<400> 163

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cccggtgaaag agaagctcgc ccatcacccg ctgggagcca gctttcagtg aagatggcag 180
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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<210> 169

<211> 1388

<212> DNA

<213> Homo sapiens

<400> 169

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<211> 2987

<212> DNA

<213> Homo sapiens

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<222> (2953)

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<211> 2411

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<212> DNA

<213> Homo sapiens

<400> 176

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<211> 874

<212> DNA

<213> Homo sapiens

<400> 177

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<211> 3265

<212> DNA

<213> Homo sapiens

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<210> 179

<211> 262

<212> PRT

<213> Homo sapiens

<400> 179

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Gly Met Pro Ala Pro Leu Gly Tyr Val Pro Gly Leu Gly Arg Gly Ala
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Thr Gly Phe Thr Thr Arg Ser Asp Ile Gly Pro Ala Arg Asp Ala Asn
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Asn Asp Thr Asn Tyr Asp Glu Phe Asn Gly Tyr Ala Gly Ser Leu Phe
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 Arg Gln Arg Asn Pro Arg Tyr Glu Lys Leu Thr Pro Val Pro Asp Ser
 195 200 205
 Phe Phe Ala Lys His Leu Gln Thr Gly Glu Asn His Thr Ser Val Asp
 210 215 220
 Pro Arg Gln Thr Gln Phe Gly Gly Leu Asn Thr Pro Tyr Pro Gly Gly
 225 230 235 240
 Leu Asn Thr Pro Tyr Pro Gly Gly Met Thr Pro Gly Leu Met Thr Pro
 245 250 255
 Gly Thr Val Ser Trp Thr
 260

<210> 180
 <211> 467
 <212> PRT
 <213> Homo sapiens

<400> 180
 His Thr Leu Ser Arg Trp Thr Lys His Ser Ile Pro Arg Trp Asn Asp
 1 5 10 15
 Ala Arg Thr Asp Asp Thr Trp His Ser Glu Leu Asp Met Arg Lys Ile
 20 25 30
 Gly Gln Ala Arg Asn Thr Leu Met Asp Met Arg Leu Ser Gln Val Ser
 35 40 45
 Asp Ser Val Ser Gly Gln Thr Val Val Asp Pro Lys Gly Tyr Leu Thr
 50 55 60
 Asp Leu Asn Ser Met Ile Pro Thr His Gly Gly Asp Ile Asn Asp Ile
 65 70 75 80
 Lys Lys Ala Arg Leu Leu Lys Ser Val Arg Glu Thr Asn Pro His
 85 90 95
 His Pro Pro Ala Trp Ile Ala Ser Ala Arg Leu Glu Glu Val Thr Gly
 100 105 110

Lys	Leu	Gln	Val	Ala	Arg	Asn	Leu	Ile	Met	Lys	Gly	Thr	Glu	Met	Cys		
		115					120					125					
Pro	Lys	Ser	Glu	Asp	Val	Trp	Leu	Glu	Ala	Ala	Arg	Leu	Gln	Pro	Gly		
	130					135					140						
Asp	Thr	Ala	Lys	Ala	Val	Val	Ala	Gln	Ala	Val	Arg	His	Leu	Pro	Gln		
145					150					155					160		
Ser	Val	Arg	Ile	Tyr	Ile	Arg	Ala	Ala	Glu	Leu	Glu	Thr	Asp	Ile	Arg		
			165						170					175			
Ala	Lys	Lys	Arg	Val	Leu	Arg	Lys	Ala	Leu	Glu	His	Val	Pro	Asn	Ser		
			180					185						190			
Val	Arg	Leu	Trp	Lys	Ala	Ala	Val	Glu	Leu	Glu	Glu	Pro	Glu	Asp	Ala		
		195					200						205				
Arg	Ile	Met	Leu	Ser	Arg	Ala	Val	Glu	Cys	Cys	Pro	Thr	Ser	Val	Glu		
	210					215					220						
Leu	Trp	Leu	Ala	Leu	Ala	Arg	Leu	Glu	Thr	Tyr	Glu	Asn	Ala	Arg	Lys		
225					230					235					240		
Val	Leu	Asn	Lys	Ala	Arg	Glu	Asn	Ile	Pro	Thr	Asp	Arg	His	Ile	Trp		
			245						250					255			
Ile	Thr	Ala	Ala	Lys	Leu	Glu	Glu	Ala	Asn	Gly	Asn	Thr	Gln	Met	Val		
		260						265						270			
Glu	Lys	Ile	Ile	Asp	Arg	Ala	Ile	Thr	Ser	Leu	Arg	Ala	Asn	Gly	Val		
	275						280					285					
Glu	Ile	Asn	Arg	Glu	Gln	Trp	Ile	Gln	Asp	Ala	Glu	Glu	Cys	Asp	Arg		
	290					295						300					
Ala	Gly	Ser	Val	Ala	Thr	Cys	Gln	Ala	Val	Met	Arg	Ala	Val	Ile	Gly		
305					310					315					320		
Ile	Gly	Ile	Glu	Glu	Glu	Asp	Arg	Lys	His	Thr	Trp	Met	Glu	Asp	Ala		
			325						330					335			
Asp	Ser	Cys	Val	Ala	His	Asn	Ala	Leu	Glu	Cys	Ala	Arg	Ala	Ile	Tyr		
			340					345					350				
Ala	Tyr	Ala	Leu	Gln	Val	Phe	Pro	Ser	Lys	Lys	Ser	Val	Trp	Leu	Arg		
		355					360						365				
Ala	Ala	Tyr	Phe	Glu	Lys	Asn	His	Gly	Thr	Arg	Glu	Ser	Leu	Glu	Ala		
	370					375						380					
Leu	Leu	Gln	Arg	Ala	Val	Ala	His	Cys	Pro	Lys	Ala	Glu	Val	Leu	Trp		
385					390					395					400		
Leu	Met	Gly	Ala	Lys	Ser	Lys	Trp	Leu	Ala	Gly	Asp	Val	Pro	Ala	Ala		
			405						410					415			
Arg	Ser	Ile	Leu	Ala	Leu	Ala	Phe	Gln	Ala	Asn	Pro	Asn	Ser	Glu	Glu		

420					425					430					
Ile	Trp	Leu	Ala	Ala	Val	Lys	Leu	Glu	Ser	Glu	Asn	Asp	Glu	Tyr	Glu
		435					440					445			
Arg	Ala	Arg	Arg	Leu	Leu	Ala	Lys	Ala	Arg	Thr	Val	Pro	Pro	Pro	Pro
	450					455					460				
Gly Cys Ser															
465															
<210> 181															
<211> 284															
<212> PRT															
<213> Homo sapiens															
<400> 181															
Val	Arg	Ala	Gly	Pro	Glu	Ala	Ala	Gly	Gln	Gly	Ala	Asp	Ser	Ala	Pro
1				5					10					15	
Thr	Ala	Arg	Val	Phe	Met	Lys	Ser	Val	Lys	Leu	Glu	Trp	Val	Gln	Asp
			20					25					30		
Asn	Ile	Arg	Ala	Ala	Gln	Asp	Leu	Cys	Glu	Glu	Ala	Leu	Arg	His	Tyr
		35					40					45			
Glu	Asp	Phe	Pro	Lys	Leu	Trp	Met	Met	Lys	Gly	Gln	Ile	Glu	Glu	Gln
	50					55					60				
Lys	Glu	Met	Met	Glu	Lys	Ala	Arg	Glu	Ala	Tyr	Asn	Gln	Gly	Leu	Lys
	65			70					75						80
Lys	Cys	Pro	His	Ser	Thr	Pro	Leu	Trp	Leu	Leu	Leu	Ser	Arg	Leu	Glu
			85					90						95	
Glu	Lys	Ile	Gly	Gln	Leu	Thr	Arg	Ala	Arg	Ala	Ile	Leu	Glu	Lys	Ser
			100				105					110			
Arg	Leu	Lys	Asn	Pro	Lys	Asn	Pro	Gly	Leu	Trp	Leu	Glu	Ser	Val	Arg
		115					120					125			
Leu	Glu	Tyr	Arg	Ala	Gly	Leu	Lys	Asn	Ile	Ala	Asn	Thr	Leu	Met	Ala
	130					135					140				
Lys	Ala	Leu	Gln	Glu	Cys	Pro	Asn	Ser	Gly	Ile	Leu	Trp	Ser	Glu	Ala
	145					150			155					160	
Ile	Phe	Leu	Glu	Ala	Arg	Pro	Gln	Arg	Arg	Thr	Lys	Ser	Val	Asp	Ala
			165					170						175	
Leu	Lys	Lys	Cys	Glu	His	Asp	Pro	His	Val	Leu	Leu	Ala	Val	Ala	Lys
			180				185						190		
Leu	Phe	Trp	Ser	Gln	Arg	Lys	Ile	Thr	Lys	Ala	Arg	Glu	Trp	Phe	His
	195					200					205				
Arg Thr Val Lys Ile Asp Ser Asp Leu Gly Asp Ala Trp Ala Phe Phe															

210	215	220
Tyr Lys Phe Glu Leu Gln His Gly Thr Glu Glu Gln Gln Glu Glu Val		
225	230	235 240
Arg Lys Arg Cys Glu Ser Ala Glu Pro Arg His Gly Glu Leu Trp Cys		
	245	250 255
Ala Val Ser Lys Asp Ile Ala Asn Trp Gln Lys Lys Ile Gly Asp Ile		
	260	265 270
Leu Arg Leu Val Ala Gly Arg Ile Lys Asn Thr Phe		
	275	280

<210> 182
 <211> 75
 <212> PRT
 <213> Homo sapiens

<400> 182																	
Gln Pro Gly Ile Lys Glu Ser Ile Leu Met Lys Glu Thr Gln Gly Pro																	
1	5	10 15															
Tyr Gly Gln Gly Phe Leu Gly Gln Asp Ser His Gln His Ile Thr His																	
	20	25 30															
Val Leu Leu Gly Arg Glu Lys Gln Tyr Ile Pro Val Glu Arg Ser Gln																	
	35	40 45															
Ser Ile Ser Gly Arg Asn Val Val Lys Gly Gly Arg Cys Tyr Ala Ala																	
	50	55 60															
Ala Pro Ser Val Pro Glu Val Ala Val Ile Pro																	
	65	70 75															

<210> 183
 <211> 75
 <212> PRT
 <213> Homo sapiens

<400> 183																	
Thr Phe Leu Leu Ser Leu Ser Tyr Ser Ser Ser Arg Tyr Phe Ser Gln																	
1	5	10 15															
Glu Phe Gln Arg Arg Leu Leu Leu Lys Cys Leu Leu Ala Ala Gln Tyr																	
	20	25 30															
Gln Ser Ile Asn Tyr Pro Phe Trp Gly Leu Ala Leu Glu Ile Ile Phe																	
	35	40 45															
Val Gly Arg Pro Asn Ser Ser Gln Gln Gly Ser Gln Ala Cys Leu Leu																	
	50	55 60															
Asp Leu Phe Pro Leu Arg Gly Arg Asn Glu Leu																	
	65	70 75															

<210> 184
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 184
 Gln Gly Thr Arg His Pro Gln Ser Leu Ser His Lys Pro Ala Lys Lys
 1 5 10 15
 Ile Asp Val Ala Arg Val Thr Phe Asp Leu Tyr Lys Leu Asn Pro Gln
 20 25 30
 Asp Phe Ile Gly Cys Leu Asn Val Lys Ala Thr Phe Tyr Asp Thr Tyr
 35 40 45
 Ser Leu Ser Tyr Asp Leu His Cys Cys Gly Ala Lys Arg Ile Met Lys
 50 55 60
 Glu Ala Phe Arg Trp Ala Leu Phe Ser Met Gln Ala Thr Gly His Val
 65 70 75 80
 Leu Leu Gly Thr Ser Cys Tyr Leu Gln Gln Leu Leu Asp Ala Thr Glu
 85 90 95
 Glu Gly Gln Pro Pro Lys Gly Lys Ala Ser Ser Leu Ile Pro Thr Cys
 100 105 110
 Leu Lys Ile Leu Gln
 115

<210> 185
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 185
 Lys Ser Ala Ala Gln Thr Ala Met Thr Thr Pro Pro Gln Thr Pro Pro
 1 5 10 15
 His Pro Tyr Phe Ile Asn Arg Gln Asp Phe Pro Cys Ile Leu Leu Arg
 20 25 30
 Ile Ser Ser Ser His Ser Pro Ala Pro Ser Pro Met Ser Trp Leu His
 35 40 45
 His Cys Lys Thr Asp Leu Leu Gln Gly Ser Gln Lys Leu Leu Leu Ala
 50 55 60
 Leu Tyr His Phe Tyr Pro His Leu Pro Pro Glu Thr Ala Thr Ile His
 65 70 75 80
 Ser His Cys Pro Ser Ala Leu Arg Pro Ser Ser Arg Ala Asp Gly Ser
 85 90 95
 Met Val Ile Leu Ser Trp Val Val Leu Leu Lys Pro Ser Gln Gly Ala
 100 105 110

Asp Ser Gln Arg Ala Ser Arg Val Ser Gly Leu Asp Asp Ser Lys Glu
 115 120 125

Gly Thr Pro Ile Phe Ile Phe Lys Thr Asp Ile Pro Arg Gly Phe
 130 135 140

<210> 186

<211> 84

<212> PRT

<213> Homo sapiens

<400> 186

Thr Gln Thr Arg His Phe Gln Leu Ala Thr Gln Ser Gly Arg Ala Gly
 1 5 10 15

Gly Asn Thr Asp Leu Asp Ile His Lys Lys Ile Lys Pro Lys Ile Lys
 20 25 30

His Ser Ile Leu Cys Pro Leu Lys Gly Leu Ile Lys Gly Thr Gln Ser
 35 40 45

Pro Pro Arg Ser Pro Leu Pro Cys Gln His His Lys Ala Ser Ser Ala
 50 55 60

His Thr Lys Gly Leu Gly Arg Gly Ile Leu Leu Pro Pro His Gln Pro
 65 70 75 80

Gln Glu Trp Thr

<210> 187

<211> 114

<212> PRT

<213> Homo sapiens

<400> 187

Arg His Trp Gly Phe Thr Ala Ser Ile Phe Ser Leu Lys Arg Phe Ile
 1 5 10 15

Thr Ser Thr Ser Lys Glu Gln Thr Asn Trp Arg Asn Val Cys Phe Phe
 20 25 30

Phe Leu Phe Ile Lys Phe Tyr Ser Thr Ala Lys Phe Gln Ile Ser Phe
 35 40 45

Thr Tyr Arg Pro Cys Lys Gly Thr Val Arg Thr Glu His Leu Phe Tyr
 50 55 60

Leu Arg Asp Lys Gly Val Glu Ile Phe Ser Leu Asn Phe Ile Arg Lys
 65 70 75 80

Gly Trp Val Gln Trp Leu Met Pro Val Ile Ser Ala Phe Trp Glu Ala
 85 90 95

Glu Ala Gly Arg Ser Leu Val Ala Arg Ser Leu Arg Pro Ala Trp Ala

100

105

110

Thr Gln

<210> 188

<211> 98

<212> PRT

<213> Homo sapiens

<400> 188

Asn Leu Ile Asn Lys Lys Lys Lys His Thr Phe Leu Gln Leu Val Cys
 1 5 10 15

Ser Leu Leu Val Glu Val Ile Asn Arg Phe Lys Glu Lys Ile Leu Ala
 20 25 30

Val Asn Pro Gln Cys Leu Gln Leu Phe Trp Gln Asn Ile Phe Lys Glu
 35 40 45

Ile Gln Gln Ala Asn Phe Glu Val Leu Met Lys Val Lys Glu Gly Gly
 50 55 60

Ile Ser Ser Phe Gly Arg Asn Glu Lys Cys Leu Thr Arg Asp Ile Thr
 65 70 75 80

Thr His Val Gly Ser Gly Cys Phe Leu Pro Lys Thr Phe Arg Glu Glu
 85 90 95

Val Asn

<210> 189

<211> 437

<212> PRT

<213> Homo sapiens

<400> 189

Lys Tyr Glu Leu Tyr Thr Glu Asn Ala Thr Thr Glu Lys Thr Glu Pro
 1 5 10 15

Asn Ser Gln Glu Asp Lys Asn Asp Gly Gly Lys Ser Arg Lys Gly Asn
 20 25 30

Ile Glu Leu Ala Ser Ser Glu Pro Gln His Phe Thr Thr Thr Val Thr
 35 40 45

Arg Cys Ser Pro Thr Val Ala Phe Val Glu Phe Pro Ser Ser Pro Gln
 50 55 60

Leu Lys Asn Asp Val Ser Glu Glu Lys Asp Gln Lys Lys Pro Glu Asn
 65 70 75 80

Glu Met Ser Gly Lys Val Glu Leu Val Leu Ser Gln Lys Val Val Lys
 85 90 95

Pro	Lys	Ser	Pro	Glu	Pro	Glu	Ala	Thr	Leu	Thr	Phe	Pro	Phe	Leu	Asp	100	105	110
Lys	Met	Pro	Glu	Ala	Asn	Gln	Leu	His	Leu	Pro	Asn	Leu	Asn	Ser	Gln	115	120	125
Val	Asp	Ser	Pro	Ser	Ser	Glu	Lys	Ser	Pro	Val	Met	Thr	Pro	Phe	Lys	130	135	140
Phe	Trp	Ala	Trp	Asp	Pro	Glu	Glu	Glu	Arg	Arg	Arg	Gln	Glu	Lys	Trp	145	150	155
Gln	Gln	Glu	Gln	Glu	Arg	Leu	Leu	Gln	Glu	Arg	Tyr	Gln	Lys	Glu	Gln	165	170	175
Asp	Lys	Leu	Lys	Glu	Glu	Trp	Glu	Lys	Ala	Gln	Lys	Glu	Val	Glu	Glu	180	185	190
Glu	Glu	Arg	Arg	Tyr	Tyr	Glu	Glu	Glu	Arg	Lys	Ile	Ile	Glu	Asp	Thr	195	200	205
Val	Val	Pro	Phe	Thr	Val	Ser	Ser	Ser	Ser	Ala	Asp	Gln	Leu	Ser	Thr	210	215	220
Ser	Ser	Ser	Met	Thr	Glu	Gly	Ser	Gly	Thr	Met	Asn	Lys	Ile	Asp	Leu	225	230	235
Gly	Asn	Cys	Gln	Asp	Glu	Lys	Gln	Asp	Arg	Arg	Trp	Lys	Lys	Ser	Phe	245	250	255
Gln	Gly	Asp	Asp	Ser	Asp	Leu	Leu	Leu	Lys	Thr	Arg	Glu	Ser	Asp	Arg	260	265	270
Leu	Glu	Glu	Lys	Gly	Ser	Leu	Thr	Glu	Gly	Ala	Leu	Ala	His	Ser	Gly	275	280	285
Asn	Pro	Val	Ser	Lys	Gly	Val	His	Glu	Asp	His	Gln	Leu	Asp	Thr	Glu	290	295	300
Ala	Gly	Ala	Pro	His	Cys	Gly	Thr	Asn	Pro	Gln	Leu	Ala	Gln	Asp	Pro	305	310	315
Ser	Gln	Asn	Gln	Gln	Thr	Ser	Asn	Pro	Thr	His	Ser	Ser	Glu	Asp	Val	325	330	335
Lys	Pro	Lys	Thr	Leu	Pro	Leu	Asp	Lys	Ser	Ile	Asn	His	Gln	Ile	Glu	340	345	350
Ser	Pro	Ser	Glu	Arg	Arg	Lys	Ser	Ile	Ser	Gly	Lys	Lys	Leu	Cys	Ser	355	360	365
Ser	Cys	Gly	Leu	Pro	Leu	Gly	Lys	Gly	Ala	Ala	Met	Ile	Ile	Glu	Thr	370	375	380
Leu	Asn	Leu	Tyr	Phe	His	Ile	Gln	Cys	Phe	Arg	Cys	Gly	Ile	Cys	Lys	385	390	395
Gly	Gln	Leu	Gly	Asp	Ala	Val	Ser	Gly	Thr	Asp	Val	Arg	Ile	Arg	Asn			

405 410 415
 Gly Leu Leu Asn Cys Asn Asp Cys Tyr Met Arg Ser Arg Ser Ala Gly
 420 425 430

Gln Pro Thr Thr Leu
 435

<210> 190
 <211> 331
 <212> PRT
 <213> Homo sapiens

<400> 190
 Ser Ala Asn His Lys Leu Glu Val Asn Gly Thr Asp Gly Leu Ala Pro
 1 5 10 15
 Val Glu Val Glu Glu Leu Leu Arg Gln Ala Ser Glu Arg Asn Ser Lys
 20 25 30
 Ser Pro Thr Glu Tyr His Glu Pro Val Tyr Ala Asn Pro Phe Tyr Arg
 35 40 45
 Pro Thr Thr Pro Gln Arg Glu Thr Val Thr Pro Gly Pro Asn Phe Gln
 50 55 60
 Glu Arg Ile Lys Ile Lys Thr Asn Gly Leu Gly Ile Gly Val Asn Glu
 65 70 75 80
 Ser Ile His Asn Met Gly Asn Gly Leu Ser Glu Glu Arg Gly Asn Asn
 85 90 95
 Phe Asn His Ile Ser Pro Ile Pro Pro Val Pro His Pro Arg Ser Val
 100 105 110
 Ile Gln Gln Ala Glu Glu Lys Leu His Thr Pro Gln Lys Arg Leu Met
 115 120 125
 Thr Pro Trp Glu Glu Ser Asn Val Met Gln Asp Lys Asp Ala Pro Ser
 130 135 140
 Pro Lys Pro Arg Leu Ser Pro Arg Glu Thr Ile Phe Gly Lys Ser Glu
 145 150 155 160
 His Gln Asn Ser Ser Pro Thr Cys Gln Glu Asp Glu Glu Asp Val Arg
 165 170 175
 Tyr Asn Ile Val His Ser Leu Pro Pro Asp Ile Asn Asp Thr Glu Pro
 180 185 190
 Val Thr Met Ile Phe Met Gly Tyr Gln Gln Ala Glu Asp Ser Glu Glu
 195 200 205
 Asp Lys Lys Phe Leu Thr Gly Tyr Asp Gly Ile Ile His Ala Glu Leu
 210 215 220
 Val Val Ile Asp Asp Glu Glu Glu Glu Asp Glu Gly Glu Ala Glu Lys

225 230 235 240
 Pro Ser Tyr His Pro Ile Ala Pro His Ser Gln Val Tyr Gln Pro Ala
 245 250 255
 Lys Pro Thr Pro Leu Pro Arg Lys Arg Ser Glu Ala Ser Pro His Glu
 260 265 270
 Asn Thr Asn His Lys Ser Pro His Lys Asn Ser Ile Ser Leu Lys Glu
 275 280 285
 Gln Glu Glu Ser Leu Gly Ser Pro Val His His Ser Pro Phe Asp Ala
 290 295 300
 Gln Thr Thr Gly Asp Gly Thr Glu Asp Pro Ser Leu Thr Ala Leu Arg
 305 310 315 320
 Met Arg Met Ala Lys Leu Gly Lys Lys Val Ile
 325 330

<210> 191
 <211> 216
 <212> PRT
 <213> Homo sapiens

<400> 191
 Leu Ser Leu Thr Ser Arg Met Glu Glu Ala Glu Leu Val Lys Gly Arg
 1 5 10 15
 Leu Gln Ala Ile Thr Asp Lys Arg Lys Ile Gln Glu Glu Ile Ser Gln
 20 25 30
 Lys Arg Leu Lys Ile Glu Glu Asp Lys Leu Lys His Gln His Leu Lys
 35 40 45
 Lys Lys Ala Leu Arg Glu Lys Trp Leu Leu Asp Gly Ile Ser Ser Gly
 50 55 60
 Lys Glu Gln Glu Glu Met Lys Lys Gln Asn Gln Gln Asp Gln His Gln
 65 70 75 80
 Ile Gln Val Leu Glu Gln Ser Ile Leu Arg Leu Glu Lys Glu Ile Gln
 85 90 95
 Asp Leu Glu Lys Ala Glu Leu Gln Ile Ser Thr Lys Glu Glu Ala Ile
 100 105 110
 Leu Lys Lys Leu Lys Ser Ile Glu Arg Thr Thr Glu Asp Ile Ile Arg
 115 120 125
 Ser Val Lys Val Glu Arg Glu Glu Arg Ala Glu Glu Ser Ile Glu Asp
 130 135 140
 Ile Tyr Ala Asn Ile Pro Asp Leu Pro Lys Ser Tyr Ile Pro Ser Arg
 145 150 155 160
 Leu Arg Lys Glu Ile Asn Glu Glu Lys Glu Asp Asp Glu Gln Asn Arg

165								170				175			
Lys	Ala	Leu	Tyr	Ala	Met	Glu	Ile	Lys	Val	Glu	Lys	Asp	Leu	Lys	Thr
180								185				190			
Gly	Glu	Ser	Thr	Val	Leu	Ser	Ser	Asn	Thr	Ser	Gly	His	Gln	Met	Thr
195								200				205			
Leu	Lys	Gly	Thr	Gly	Val	Lys	Val								
210								215							

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<210> 192
<211> 290
<212> PRT
<213> Homo sapiens
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<400> 192															
Arg 1	Gly	Ala	Gly	Thr 5	Gln	Pro	Gly	Pro	Leu 10	Leu	Lys	Lys	Pro	Tyr 15	Gln
Pro	Arg	Ile	Lys 20	Ile	Ser	Lys	Thr	Ser 25	Val	Asp	Gly	Asp	Pro 30	His	Phe
Val	Val	Asp 35	Phe	Pro	Leu	Ser	Arg 40	Leu	Thr	Val	Cys	Phe 45	Asn	Ile	Asp
Gly	Gln 50	Pro	Gly	Asp	Ile	Leu 55	Arg	Leu	Val	Ser	Asp 60	His	Arg	Asp	Ser
Gly 65	Val	Thr	Val	Asn 70	Gly	Glu	Leu	Ile	Gly 75	Ala	Pro	Ala	Pro	Pro	Asn 80
Gly	His	Lys	Lys	Gln 85	Arg	Thr	Tyr	Leu 90	Arg	Thr	Ile	Thr	Ile	Leu 95	Ile
Asn	Lys	Pro	Glu 100	Arg	Ser	Tyr	Leu	Glu 105	Ile	Thr	Pro	Ser	Arg 110	Val	Ile
Leu	Asp 115	Gly	Gly	Asp	Arg	Leu 120	Val	Leu	Pro	Cys	Asn 125	Gln	Ser	Val	Val
Val 130	Gly	Ser	Trp	Gly	Leu 135	Glu	Val	Ser	Val	Ser	Ala 140	Asn	Ala	Asn	Val
Thr 145	Val	Thr	Ile	Gln 150	Gly	Ser	Ile	Ala	Phe	Val 155	Ile	Leu	Ile	His	Leu 160
Tyr	Lys	Lys	Pro 165	Ala	Pro	Phe	Gln	Arg 170	His	His	Leu	Gly	Phe 175	Tyr	Ile
Ala	Asn	Ser	Glu 180	Gly	Leu	Ser	Ser	Asn 185	Cys	His	Gly	Leu	Leu 190	Gly	Gln
Phe	Leu 195	Asn	Gln	Asp	Ala	Arg	Leu 200	Thr	Glu	Asp	Pro 205	Ala	Gly	Pro	Ser
Gln	Asn	Leu	Thr	His	Pro	Leu	Leu	Leu	Gln	Val	Gly	Glu	Gly	Pro	Glu

210		215		220
Ala Val Leu Thr Val Lys Gly His Gln Val Pro Val Val Trp Lys Gln				
225		230		235 240
Arg Lys Ile Tyr Asn Gly Glu Glu Gln Ile Asp Cys Trp Phe Ala Arg				
	245		250	255
Asn Asn Ala Ala Lys Leu Ile Asp Gly Glu Tyr Lys Asp Tyr Leu Ala				
	260		265	270
Ser His Pro Phe Asp Thr Gly Met Thr Leu Gly Gln Gly Met Ser Arg				
	275		280	285
Glu Leu				
290				

<210> 193
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 193
Gly His Gly Ser Tyr Arg Thr Pro Lys Arg Ser Ser Thr Asn Cys Leu
1 5 10 15
Gly Lys Phe Trp Glu Leu Ala Asp Ala Lys Lys Lys Arg Lys Lys Val
20 25 30
His Gln Lys Gln Lys Arg Ala Thr Ile Arg Ala Thr Glu Leu Ala Lys
35 40 45
Gly Lys Arg His Val Gly Gly Ser Val Ser His Leu Ser Pro Gly Thr
50 55 60
Val Lys Cys Val Ile Thr Ala Gln Val His Gly Lys Arg Gln Gln Gln
65 70 75 80
Lys Ala Leu Cys Arg Leu Glu
85

<210> 194
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 194
Gln Phe Ile Gln Gly Met Cys Ser Arg Lys Phe Ala Trp Tyr Leu Phe
1 5 10 15
Val Lys His Leu Lys Val Pro Gln Ile Gly Phe Lys Val Pro Gly Ala
20 25 30
Val Gly Trp His Glu Asp Pro Arg Lys Ala Thr Glu His Pro Ala Arg
35 40 45

Leu Leu His Arg Ala Gly Glu Val Thr Phe Tyr Leu Phe Phe Arg Leu
 50 55 60

His Pro Ile Phe His Leu Pro Phe Leu Gln Arg Ala Gln Gly Ala Ile
 65 70 75 80

Ile Phe

<210> 195

<211> 251

<212> PRT

<213> Homo sapiens

<400> 195

Asp Asp Arg Ser His Ala Phe His His His Lys Ser Val Ile Asp Ala
 1 5 10 15

Met Lys Gly Arg Pro Gly Gln Ser Pro Leu Phe Arg Pro Ser Gln Gly
 20 25 30

Thr Gly Arg Val Pro Gly Thr Arg Gln Met Leu Gln Asp Ser Val Gln
 35 40 45

Ala Ala Leu Glu Glu Val Ala Ala Ser Glu Ala Leu Leu Gly Pro Leu
 50 55 60

Ser Pro Pro Gly Lys Ser Arg Asp Gly Asn Ala Ser Ala Gly Glu Gly
 65 70 75 80

Cys Gln Val Phe Arg Ser Pro Pro Ser Glu Val Pro Ser Pro Pro Gly
 85 90 95

Gln Asp Thr Pro Thr Ser Thr Phe Leu Lys Arg Arg Trp Asp Ser Gln
 100 105 110

Val Thr Leu Leu Pro Ser Lys Lys Cys Lys Ser Gln Gln Leu Gln Glu
 115 120 125

Ser Val Ser Gln Phe Pro Pro Ser Pro Gly Gly Arg Arg Glu Gly Pro
 130 135 140

Trp Ser Ser Leu Gly Ala Gly Gly Pro Ser Ser His Ile Ser Ala Lys
 145 150 155 160

Tyr Phe Pro Leu Pro Val Gln Pro Ala Cys Pro Cys Thr Ser Leu Glu
 165 170 175

Ala Gly His Arg Pro Gly Arg Cys Val Asp Leu Gln Glu Ser Gln Gly
 180 185 190

Val Asp His Pro Ala Asn Leu Arg Leu Ser Ser Gly Thr Ser Cys Arg
 195 200 205

Arg Gly Leu Asn Pro Thr Pro Val Gln Val Arg Ser His Glu Ala Ser
 210 215 220

Ser Gln Val Lys Met His Gln Thr Val Thr Trp Arg Phe Tyr Thr Phe
 225 230 235 240

Leu Asn Phe Gln Gln Leu Gly Ala Cys Leu Leu
 245 250

<210> 196
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 196
 Phe Ala Lys Gly Leu Asp Arg Glu Arg Gly Asn Met Asn Leu Asp Arg
 1 5 10 15
 Glu Gly Asp Thr Ile Glu Arg Arg Thr Leu Pro Thr Leu Gln Ala Ser
 20 25 30
 Asp Leu Pro Phe Glu Gly Thr Leu Asp Gly Gly Arg Gly Arg Gly Leu
 35 40 45
 Gly Leu Ser Tyr Ser His Glu Leu Leu Ala Ser Thr Asp Ser Ser Asn
 50 55 60
 Ser Pro Pro His Lys Ile Thr Gly Thr Asn Ile Phe Asn Phe Ala Tyr
 65 70 75 80
 Leu Phe Leu Gly Glu Phe Pro Pro Ser Leu Phe Cys Pro Glu Thr Thr
 85 90 95
 Gly Lys Ala Leu His Phe Glu Arg Glu Glu Lys Leu Phe Gly Thr Thr
 100 105 110
 Pro Met Ile Phe Phe Phe Val Ile Leu Glu Ile Tyr Phe Phe Ile Ile
 115 120 125
 Leu Ile Ala Asp Val Leu Phe Ile Tyr Leu Ile Cys Ile Arg Ser Leu
 130 135 140
 Asn Asn Arg Lys Leu
 145

<210> 197
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 197
 Gly Gln Arg Cys Pro Arg Gly Thr Asp Leu Pro Glu Ala Pro Thr Leu
 1 5 10 15
 Pro Leu Trp Val Asn His Phe Ser Pro Gly Leu Ser Leu Arg Leu His
 20 25 30
 Gln Leu Val Gly Leu Gln Ala Ser Pro Pro Asp Ser Pro His Cys Trp
 35 40 45

Ala Thr Leu Asn Leu Lys Phe His Cys Pro Ala Pro Pro Thr Pro Thr
 50 55 60
 Pro Lys Phe Pro Lys Glu Met Ser Lys Thr His Ala His Thr Tyr Ile
 65 70 75 80
 His Thr Cys Thr Cys Ala His Thr Ser Cys Val Thr Thr Gly Gln Gly
 85 90 95
 Asn Ala Ser Leu Arg Ile Pro Gly Pro Gly Pro Gly Val Lys Gly Cys
 100 105 110
 Ser Gly Thr Leu Pro Pro Asn Leu Leu Gly Gly Pro Pro Ser Val Gly
 115 120 125
 Ala Gly Leu Gly Val Cys Leu Asp Ser Gln Asp Leu Pro Arg Ser
 130 135 140

<210> 198
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 198
 Ser His Thr Met His Cys Lys Glu Thr Lys Gln Leu Tyr Arg Ser Gly
 1 5 10 15
 Asp Ala Ser Val Tyr Asn Thr Phe Met Ser Arg Ile Arg Ser Arg His
 20 25 30
 Gln Asp Leu Tyr Thr Val Ala Ala Ala Ile Gly Thr Met Ile Gln Asn
 35 40 45
 Ile Lys Tyr Ile Ser Ile Tyr Ile Asn Thr Gln Leu Gly Trp Gly Arg
 50 55 60
 Met Leu Gly Asp Leu Val Ser Pro Ala Glu Gly Leu Gly Gly Arg Glu
 65 70 75 80
 Gly Gly Gly Lys Gly Phe Leu Thr Phe Val Leu Asn Asp Gly Ser Glu
 85 90 95
 Gly Arg Arg Glu Met Gly Lys His Ser Leu His Thr Leu Met Cys Ser
 100 105 110
 His Thr His Ala Gln Thr Lys His Arg His Arg Arg Val Ser Asn Ser
 115 120 125
 Leu Thr Leu Ile Gly Lys Gln Ala Trp Asp Ile Pro Leu Gln
 130 135 140

<210> 199
 <211> 189
 <212> PRT
 <213> Homo sapiens

<400> 199

Gln Cys Arg Gly Phe Asn Leu Lys Ala Tyr Arg Asn Ala Ala Glu Ile
 1 5 10 15
 Val Gln Tyr Gly Val Lys Asn Asn Thr Thr Phe Leu Glu Cys Ala Pro
 20 25 30
 Lys Ser Pro Gln Ala Ser Ile Lys Trp Leu Leu Gln Lys Asp Lys Asp
 35 40 45
 Arg Arg Lys Glu Val Lys Leu Asn Glu Arg Ile Ile Ala Thr Ser Gln
 50 55 60
 Gly Leu Leu Ile Arg Ser Val Gln Gly Ser Asp Gln Gly Leu Tyr His
 65 70 75 80
 Cys Ile Ala Thr Glu Asn Ser Phe Lys Gln Thr Ile Ala Lys Ile Asn
 85 90 95
 Phe Lys Val Leu Asp Ser Glu Met Val Ala Val Val Thr Asp Lys Trp
 100 105 110
 Ser Pro Trp Thr Trp Ala Ser Ser Val Arg Ala Leu Pro Phe His Pro
 115 120 125
 Lys Asp Ile Met Gly Ala Phe Ser His Ser Glu Met Gln Met Ile Asn
 130 135 140
 Gln Tyr Cys Lys Asp Thr Arg Gln Gln His Gln Gln Gly Asp Glu Ser
 145 150 155 160
 Gln Lys Met Arg Gly Asp Tyr Gly Lys Leu Lys Ala Leu Ile Asn Ser
 165 170 175
 Arg Lys Ser Arg Asn Arg Arg Asn Gln Leu Pro Glu Ser
 180 185

<210> 200

<211> 97

<212> PRT

<213> Homo sapiens

<220>

<221> MOD_RES

<222> (97)

<223> Any amino acid

<400> 200

Phe Phe Arg Glu Ala Glu Ser Pro Phe Val Ala Arg Leu Glu Cys Ser
 1 5 10 15
 Gly Ala Ile Ser Ala His Cys Ser Thr Val Ser Ala His Cys Ser Leu
 20 25 30
 Arg Pro Pro Val Phe Lys Arg Phe Ser Cys Leu Ser Leu Leu Ser Ser
 35 40 45

Trp Asp Tyr Arg Cys Ala Pro Pro Arg Pro Ala Asn Phe Cys Ile Phe
 50 55 60
 Ser Arg Asp Gly Val Ser Leu Cys Trp Pro Gly Trp Ser Gln Ser Arg
 65 70 75 80
 Pro Arg Asp Pro Ala His Leu Gly Leu Pro Lys Cys Trp Asp Tyr Arg
 85 90 95

Xaa

<210> 201
 <211> 354
 <212> PRT
 <213> Homo sapiens

<400> 201
 Glu Thr Arg Val Lys Thr Ser Leu Glu Leu Leu Arg Thr Gln Leu Glu
 1 5 10 15
 Pro Thr Gly Thr Val Gly Asn Thr Ile Met Thr Ser Gln Pro Val Pro
 20 25 30
 Asn Glu Thr Ile Ile Val Leu Pro Ser Asn Val Ile Asn Phe Ser Gln
 35 40 45
 Ala Glu Lys Pro Glu Pro Thr Asn Gln Gly Gln Asp Ser Leu Lys Lys
 50 55 60
 His Leu His Ala Glu Ile Lys Val Ile Gly Thr Ile Gln Ile Leu Cys
 65 70 75 80
 Gly Met Met Val Leu Ser Leu Gly Ile Ile Leu Ala Ser Ala Ser Phe
 85 90 95
 Ser Pro Asn Phe Thr Gln Val Thr Ser Thr Leu Leu Asn Ser Ala Tyr
 100 105 110
 Pro Phe Ile Gly Pro Phe Phe Phe Ile Ile Ser Gly Ser Leu Ser Ile
 115 120 125
 Ala Thr Glu Lys Arg Leu Thr Lys Leu Leu Val His Ser Ser Leu Val
 130 135 140
 Gly Ser Ile Leu Ser Ala Leu Ser Ala Leu Val Gly Phe Ile Ile Leu
 145 150 155 160
 Ser Val Lys Gln Ala Thr Leu Asn Pro Ala Ser Leu Gln Cys Glu Leu
 165 170 175
 Asp Lys Asn Asn Ile Pro Thr Arg Ser Tyr Val Ser Tyr Phe Tyr His
 180 185 190
 Asp Ser Leu Tyr Thr Thr Asp Cys Tyr Thr Ala Lys Ala Ser Leu Ala
 195 200 205

Gly Thr Leu Ser Leu Met Leu Ile Cys Thr Leu Leu Glu Phe Cys Leu
 210 215 220
 Ala Val Leu Thr Ala Val Leu Arg Trp Lys Gln Ala Tyr Ser Asp Phe
 225 230 235 240
 Pro Gly Val Ser Val Leu Ala Gly Phe Thr Glu Lys Thr Pro Gly Phe
 245 250 255
 Glu Trp Lys Leu Thr Ala Glu Ser His Arg Pro Arg Gln Gln Gln Arg
 260 265 270
 Gln Gln Gln Thr Phe Gly Ile Leu Phe Ser Thr His Val Leu Ile Ile
 275 280 285
 His Leu Ile Ile Phe Leu Val Glu Lys Leu Gln Ile Ser Leu Phe Asn
 290 295 300
 Ile Tyr Ile Gln Phe Asn Lys Pro Leu Ala Ser Tyr Leu Phe Ser His
 305 310 315 320
 Leu Arg Tyr Phe Phe Pro Pro His Leu Ala Pro Val Pro Pro Phe Leu
 325 330 335
 Phe Ser Leu Cys Lys Arg Lys Tyr Leu Thr Tyr Leu Gly Pro Thr Ser
 340 345 350

Ile Met

<210> 202
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 202
 Glu Lys Thr Pro Gly Phe Glu Trp Lys Leu Thr Ala Glu Ser His Arg
 1 5 10 15
 Pro Arg Gln Gln Gln Arg Gln Gln Gln Thr Phe Gly Ile Leu Phe Ser
 20 25 30
 Thr His Val Leu Ile Ile His Leu Ile Ile Phe Leu Val Glu Lys Leu
 35 40 45
 Gln Ile Ser Leu Phe Asn Ile Tyr Ile Gln Phe Asn Lys Pro Leu Ala
 50 55 60
 Ser Tyr Leu Phe Ser His Leu Arg Tyr Phe Phe Pro Pro His Leu Ala
 65 70 75 80
 Pro Val Pro Pro Phe Leu Phe Ser Leu Cys Lys Arg Lys Tyr Leu Thr
 85 90 95
 Tyr Leu Gly Pro Thr Ser Ile Met
 100

<210> 203
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 203
 His Lys Lys Asn Phe Trp Gln Ile Phe Ile Gln Ile Ala Cys Leu Gln
 1 5 10 15
 Trp Gln Ile Ser Gln His Phe Ser Leu Phe Cys Leu Cys Leu Ser Leu
 20 25 30
 Cys Ile Phe Leu Glu Arg Lys Leu Asn Ala Phe Asn Val Leu Ile Ile
 35 40 45
 Thr Leu Leu Lys Leu Asp Pro Asn Met Leu Asn Ile Ser Ser Cys Lys
 50 55 60
 Gly Arg Arg Gly Arg Glu Glu Gln Gly Gln Gly Gly Glu Glu Lys Asn
 65 70 75 80
 Thr Ser Gly Glu Arg Thr Ser Asn Leu Gln Glu Ala Tyr
 85 90

<210> 204
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 204
 Arg Pro Lys Pro Gly His Pro Leu Tyr Ser Lys Tyr Met Arg Gly Asp
 1 5 10 15
 Val Leu Val Met Leu Lys Gln Thr Glu Asn Asn Tyr Leu Glu Cys Gln
 20 25 30
 Lys Gly Glu Asp Thr Gly Arg Val His Leu Ser Gln Met Lys Ile Ile
 35 40 45
 Thr Pro Leu Asp Glu His Leu Arg Ser Arg Pro Asn Asp Pro Ser His
 50 55 60
 Ala Gln Lys Pro Val Asp Ser Gly Ala Pro His Ala Val Val Leu His
 65 70 75 80
 Asp Phe Pro Ala Glu Gln Val Asp Asp Leu Asn Leu Thr Ser Gly Glu
 85 90 95
 Ile Gly Leu Ser Ser Gly Glu Asp Arg Tyr Arg Leu Val Gln Arg Glu
 100 105 110

Leu

<210> 205

<211> 225

<212> PRT

<213> Homo sapiens

<400> 205

Thr Ser Leu Leu Glu Lys Leu Val Tyr Leu Leu Glu Lys Ile Asp Thr
 1 5 10 15

Asp Trp Tyr Arg Gly Asn Cys Arg Asn Gln Ile Gly Ile Phe Pro Ala
 20 25 30

Asn Tyr Val Lys Val Ile Ile Asp Ile Pro Glu Gly Gly Asn Gly Lys
 35 40 45

Arg Glu Cys Val Ser Ser His Cys Val Lys Gly Ser Arg Cys Val Ala
 50 55 60

Arg Phe Glu Tyr Ile Gly Glu Gln Lys Asp Glu Leu Ser Phe Ser Glu
 65 70 75 80

Gly Glu Ile Ile Ile Leu Lys Glu Tyr Val Asn Glu Glu Trp Ala Arg
 85 90 95

Gly Glu Val Arg Gly Arg Thr Gly Ile Phe Pro Leu Asn Phe Val Glu
 100 105 110

Pro Val Glu Asp Tyr Pro Thr Ser Gly Ala Asn Val Leu Ser Thr Lys
 115 120 125

Val Pro Leu Lys Thr Lys Lys Glu Asp Ser Gly Ser Asn Ser Gln Val
 130 135 140

Asn Ser Leu Pro Ala Glu Trp Cys Glu Ala Leu His Ser Phe Thr Ala
 145 150 155 160

Glu Thr Ser Asp Asp Leu Ser Phe Lys Arg Gly Asp Arg Ile Gln Ile
 165 170 175

Leu Glu Arg Leu Asp Ser Asp Trp Cys Arg Gly Arg Leu Gln Asp Arg
 180 185 190

Glu Gly Ile Phe Pro Ala Val Phe Val Arg Pro Cys Pro Ala Glu Ala
 195 200 205

Lys Ser Met Leu Ala Ile Val Pro Lys Gly Gln Glu Gly Gln Ser Leu
 210 215 220

Ile

225

<210> 206

<211> 105

<212> PRT

<213> Homo sapiens

<400> 206

Cys Ile Gly Phe Ser Ser Gly Phe Asp Lys Val Lys Arg Ile Val Thr
 1 5 10 15
 Arg Val Thr Gln Thr Cys Gln Leu Ser Glu Ser Leu Val Val Lys Pro
 20 25 30
 Glu Leu Gly Lys Leu Ser Leu Arg Arg Leu Lys Glu Arg Ala Gln Val
 35 40 45
 Gly Ile Cys Val Ile Thr Val Leu Leu Pro Arg His Gly Val Asp Asn
 50 55 60
 Lys Ile Pro Leu Gln Ser Thr Gly Val Ser Val Arg Leu Val Leu Gln
 65 70 75 80
 Lys Ala Ala His Trp Glu Trp Gly Gly Ala Cys Gly Lys Pro Asp Cys
 85 90 95
 Gly Glu Lys Leu Gly Glu Asn Gly Ser
 100 105

<210> 207
 <211> 83
 <212> PRT
 <213> Homo sapiens

<400> 207
 Leu Cys Gly Ala Ala Ala Ser Cys Met Met Leu Gly Ser Leu Ala Pro
 1 5 10 15
 Asp Pro Gly Ser Arg Arg His Ser Gly Gln Ala Ala Leu Arg Pro Arg
 20 25 30
 Arg Tyr Pro Thr Leu Trp Asp Arg Cys Arg Lys Arg Trp Leu Arg Pro
 35 40 45
 Ile Phe Thr Gln Leu Leu Ala Ala Val Trp Leu Thr Thr Arg Ser Ser
 50 55 60
 Pro Phe Pro Val Ser Arg Phe Leu Gln His Gln Ala Asn Thr Tyr Thr
 65 70 75 80
 Ser Ala Leu

<210> 208
 <211> 581
 <212> PRT
 <213> Homo sapiens

<400> 208
 Tyr Phe Cys Met Met Thr Glu Ala Glu Gln Asp Lys Trp Gln Ala Val
 1 5 10 15
 Leu Gln Asp Cys Ile Arg His Cys Asn Asn Gly Ile Pro Glu Asp Ser
 20 25 30

Lys Val Glu Gly Pro Ala Phe Thr Asp Ala Ile Arg Met Tyr Arg Gln
 35 40 45
 Ser Lys Glu Leu Tyr Gly Thr Trp Glu Met Leu Cys Gly Asn Glu Val
 50 55 60
 Gln Ile Leu Ser Asn Leu Val Met Glu Glu Leu Gly Pro Glu Leu Lys
 65 70 75 80
 Ala Glu Leu Gly Pro Arg Leu Lys Gly Lys Pro Gln Glu Arg Gln Arg
 85 90 95
 Gln Trp Ile Gln Ile Ser Asp Ala Val Tyr His Met Val Tyr Glu Gln
 100 105 110
 Ala Lys Ala Arg Phe Glu Glu Val Leu Ser Lys Val Gln Gln Val Gln
 115 120 125
 Pro Ala Met Gln Ala Val Ile Arg Thr Asp Met Asp Gln Ile Ile Thr
 130 135 140
 Ser Lys Glu His Leu Ala Ser Lys Ile Arg Ala Phe Ile Leu Pro Lys
 145 150 155 160
 Ala Glu Val Cys Val Arg Asn His Val Gln Pro Tyr Ile Pro Ser Ile
 165 170 175
 Leu Glu Ala Leu Met Val Pro Thr Ser Gln Gly Phe Thr Glu Val Arg
 180 185 190
 Asp Val Phe Phe Lys Glu Val Thr Asp Met Asn Leu Asn Val Ile Asn
 195 200 205
 Glu Gly Gly Ile Asp Lys Leu Gly Glu Tyr Met Glu Lys Leu Ser Arg
 210 215 220
 Leu Ala Tyr His Pro Leu Lys Met Gln Ser Cys Tyr Glu Lys Met Glu
 225 230 235 240
 Ser Leu Arg Leu Asp Gly Leu Gln Gln Arg Phe Asp Val Ser Ser Thr
 245 250 255
 Ser Val Phe Lys Gln Arg Ala Gln Ile His Met Arg Glu Gln Met Asp
 260 265 270
 Asn Ala Val Tyr Thr Phe Glu Thr Leu Leu His Gln Glu Leu Gly Lys
 275 280 285
 Gly Pro Thr Lys Glu Glu Leu Cys Lys Ser Ile Gln Arg Val Leu Glu
 290 295 300
 Arg Val Leu Lys Lys Tyr Asp Tyr Asp Ser Ser Ser Val Arg Lys Arg
 305 310 315 320
 Phe Phe Arg Glu Ala Leu Leu Gln Ile Ser Ile Pro Phe Leu Leu Lys
 325 330 335

Lys Leu Ala Pro Thr Cys Lys Ser Glu Leu Pro Arg Phe Gln Glu Leu
 340 345 350
 Ile Phe Glu Asp Phe Ala Arg Phe Ile Leu Val Glu Asn Thr Tyr Glu
 355 360 365
 Glu Val Val Leu Gln Thr Val Met Lys Asp Ile Leu Gln Ala Val Lys
 370 375 380
 Glu Ala Ala Val Gln Arg Lys His Asn Leu Tyr Arg Asp Ser Met Val
 385 390 395 400
 Met His Asn Ser Asp Pro Asn Leu His Leu Leu Ala Glu Gly Ala Pro
 405 410 415
 Ile Asp Trp Gly Glu Glu Tyr Ser Asn Ser Gly Gly Gly Gly Ser Pro
 420 425 430
 Ala Pro Ala Pro Arg Ser Gln Pro Pro Ser Arg Lys Ser Asp Gly Ala
 435 440 445
 Pro Ser Arg Trp Ser Leu Trp Ser Arg Met Arg Arg Trp Gly Cys Pro
 450 455 460
 Leu Arg Leu Ala Leu Ser His His His Leu Arg Pro Arg Thr Val Ser
 465 470 475 480
 Leu Arg Ser Glu Ala Cys Trp Pro Lys Val Cys Gly Leu Arg Ala Pro
 485 490 495
 His Gln Pro Ala Pro Cys Ser Thr Gly Pro Pro Leu Gly Arg Val Pro
 500 505 510
 Ser Leu Arg Pro Pro Pro Arg Pro Pro Arg Arg Leu Pro His Pro Ser
 515 520 525
 Ser Ile Ser Cys Leu Glu Arg Leu Trp Thr Leu Gly Pro Pro Ser Pro
 530 535 540
 Ala Thr Arg Arg Leu Glu Ser Arg Cys Pro Ala Pro Ala Ala Thr Pro
 545 550 555 560
 Pro Ser Thr Pro Pro Pro Arg Thr Val Gln Gly Cys Arg Leu Ser Ser
 565 570 575
 Arg Pro Val Gly Pro
 580

<210> 209

<211> 466

<212> PRT

<213> Homo sapiens

<400> 209

Pro Gln Arg Ala Ala Pro Pro Pro His Pro Gly Pro Gln Arg Pro Pro
 1 5 10 15

Ala	Trp	Arg	Ala	Val	Ala	Phe	Pro	Arg	Gly	Trp	Leu	Thr	Pro	Gly	Cys
			20					25					30		
Trp	Gly	Trp	Ala	Ala	Ala	Pro	Ala	Ala	Val	Ala	Val	Leu	Leu	Ala	Pro
		35					40					45			
Val	Asp	Gly	Gly	Ala	Leu	Gly	Gln	Gln	Val	Gln	Val	Gly	Val	Ala	Val
	50					55					60				
Val	His	Asp	His	Ala	Val	Pro	Val	Glu	Val	Val	Leu	Pro	Leu	His	Arg
	65				70					75					80
Gly	Leu	Leu	His	Ser	Leu	Gln	Asp	Val	Leu	His	Asp	Gly	Leu	Gln	His
				85					90					95	
His	Leu	Leu	Val	Arg	Val	Phe	His	Gln	Asp	Glu	Pro	Gly	Lys	Val	Leu
			100					105					110		
Glu	Asp	Gln	Leu	Leu	Glu	Pro	Gly	Gln	Leu	Arg	Leu	Ala	Gly	Arg	Gly
		115					120					125			
Gln	Leu	Leu	Glu	Gln	Glu	Arg	Asp	Ala	Asp	Leu	Gln	Gln	Arg	Leu	Pro
		130				135					140				
Glu	Glu	Pro	Leu	Pro	His	Arg	Ala	Ala	Val	Val	Val	Val	Phe	Leu	Gln
	145				150					155					160
His	Pro	Leu	Gln	Asp	Pro	Leu	Asp	Gly	Leu	Ala	Gln	Leu	Leu	Leu	Gly
			165					170						175	
Gly	Pro	Leu	Pro	Gln	Leu	Leu	Val	Gln	Glu	Gly	Leu	Glu	Arg	Ile	His
			180					185					190		
Gly	Ile	Val	His	Leu	Leu	Pro	His	Val	Asp	Leu	Gly	Ser	Leu	Leu	Glu
		195					200					205			
His	Gly	Arg	Ala	Gly	His	Ile	Lys	Ser	Leu	Leu	Gln	Pro	Val	Gln	Ser
	210					215					220				
Gln	Arg	Leu	His	Leu	Leu	Ile	Ala	Ala	Leu	His	Leu	Gln	Gly	Val	Val
	225				230					235					240
Arg	Gln	Pro	Gly	Gln	Leu	Leu	His	Val	Leu	Ala	Gln	Leu	Val	Asn	Ala
				245					250					255	
Ala	Leu	Val	Asp	Asp	Val	Gln	Val	His	Val	Arg	Asp	Leu	Leu	Glu	Glu
			260					265					270		
Asp	Ile	Ser	His	Leu	Ser	Glu	Ala	Leu	Ala	Gly	Gly	Asp	His	Gln	Gly
		275					280					285			
Leu	Gln	Asp	Gly	Trp	Asp	Val	Gly	Leu	Asp	Met	Val	Pro	His	Ala	His
	290					295					300				
Leu	Cys	Leu	Gly	Glu	Asp	Glu	Gly	Ser	Asp	Leu	Ala	Gly	Lys	Val	Leu
	305				310					315					320
Leu	Gly	Gly	Asp	Asn	Leu	Val	His	Val	Ser	Ser	Asp	Asp	Gly	Leu	His

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<210> 210
<211> 29
<212> DNA
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence: Consensus
sequence
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29